DOCUMENT RESUME

ED 087 203 48 FL 004 896

AUTHOR	Hale, Austin
TITLE	Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal: Part I, General Approach.
INSTITUTION	Oklahoma Univ., Norman. Summer Inst. of Linguistics.
SPONS AGENCY	Institute of International Studies (DHEW/OE), Washington, D.C.
BUREAU NO	BR-9-7721
PUB DATE	73
CONTRACT	OEC-0-9-097721-2778
NOTE	476p.
AVAILABLE FROM	Summer Institute of Linguistics, Hungton Beach, Cal. 92648 ($9.75; $28.00 if purchased together with FL 004 895, FL 004 897, and FL 004 898)
EDRS PRICE	MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	Deep Structure; *Descriptive Linguistics; Discourse Analysis; Language Typology; *Morphology (Languages); *Nepali; Paragraphs; Phrase Structure; Semantics; Sentence Structure; *Structural Linguistics; Surface Structure; Syntax; Transformation Generative Grammar
IDENTIFIERS	Kham; Maithili; *Nepal; Sherpa; Sunwar; Tharu Bhojpuri

ABSTRACT

This volume, the first in a series of four on the languages of Nepal, contains the following papers: "Toward the Systematization of Display Grammar," "Clause Patterns in Kham," "Tentative Systemic Organization of Nepali Sentences," "Maithili Sentences," "Notation for Simultaneous Representation of Grammatical and Sememic Components in Connected Discourse," "Paired-Sentence Reversals in the Discovery of Underlying and Surface Structures in Sherpa Discourse," "Contra-Expectancy Particles in Tharu Bhojpuri," "Chaining and Spotlighting: Two types of Paragraph Boundaries in Sunwar," and "An Approach to Discourse in Sunwar." For other volumes in the series, see FL 004 895, FL 004 897, and FL 004 898. (DD)

ED 087203

TITLE VI, NDEA, SEC 602
BUREAU NO. 9-7721
CONTRACT NO. OEC-0-9-097721-2778

FL

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY
F. Williams (115)
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

Clause, Sentence, and Discourse Patterns

in selected languages of Nepal

I: General Approach

FL 004 896

Clause, Sentence, and Discourse Patterns

in selected languages of Nepal

SUMMER INSTITUTE OF LINGUISTICS PUBLICATIONS
IN
LINGUISTICS AND RELATED FIELDS
PUBLICATION NUMBER 40
(Part I, General Approach)

EDITOR
Irvine Davis
ASSISTANT EDITORS
Alan C. Wares   Iris M. Wares
CONSULTING EDITORS
Doris Bartholomew   William R. Merrifield
Robert E. Longacre
Eugene Loos   Kenneth L. Pike

PUBLISHER
Benjamin F. Elson

Clause, Sentence, and Discourse Patterns

in selected languages of Nepal

Part I, General Approach

Austin Hale
Summer Institute of Linguistics
Institute of Nepal and Asiatic Studies
Tribhuvan University
Kathmandu, Nepal

[The research reported herein was performed under the project direction of Kenneth L. Pike pursuant to contract No. OEC-0-9-097721-2778 (014) with the Institute of International Studies, U. S. Department of Health, Education and Welfare, and constitutes the final report of research carried out under that contract.]

A Publication of the
SUMMER INSTITUTE OF LINGUISTICS
of the
UNIVERSITY OF OKLAHOMA
Norman

1973

Complete Set ISBN 0-88312-042-9
Part I ISBN 0-88312-043-7

Produced by University Press
Tribhuvan University, Kathmandu.

Acknowledgments

This volume is the fruit of cooperation and collaboration. We are especially grateful to Dr. T. N. Upraity, Vice Chancellor of Tribhuvan University, for his encouragement, for his dedication to research scholarship, and for the facilities and opportunity to carry out research that have made this volume possible.

We also wish to express our thanks to Dr. P. R. Sharma, Dean of the Institute of Nepal and Asiatic Studies, for his active interest in the work leading to the reproduction of this report.

To Dr. and Mrs. Kenneth L. Pike we wish to express appreciation for nine very stimulating and fruitful months of work together. They have planted seeds which will bear fruit for many years to come.

For work that went considerably beyond routine editing, we are indebted to Susanne Hargrave and Margrit Hale, and for an excellent job of converting an often-difficult manuscript into clean photo ready copy we owe a vote of thanks to Jeannette Newton, Madeline Troyer, and Heiderose Schöttelndreyer. We also wish to express our real appreciation to the manager of the University Press, Robert Critchfield, and to his staff for maintaining a high standard of reproduction and a spirit of service and cooperation in the face of shortages, deadlines, and the pressures of other work.

Much of the work that has gone into this report bears no author credit. Without the encouragement and administrative support of our Branch Director, Lester O. Troyer, and his administrative staff, the completion of this volume would have been all but impossible. Many were the times when the Branch Director personally relieved project members of other duties or facilitated their work in other ways, and this has been greatly appreciated.

We all wish to express our appreciation to the Institute of International Studies, U. S. Office of Education, for making it possible for Dr. and Mrs. Pike and other members of the research team to attend the workshop and for helping us in many ways in the preparation of this report.

Table of Contents

Acknowledgments v

Toward the systematization of display grammar, Austin Hale. 1

Clause patterns in Kham, David E. Watters 39

Tentative systemic organization of Nepali sentences,
Maria Hari 203

Maithili sentences, Alice Davis 259

Notation for simultaneous representation of grammatical
and sememic components in connected discourse,
Burkhard Schöttelndreyer and Kenneth L. Pike 321

Paired-sentence reversals in the discovery of underlying
and surface structures in Sherpa discourse,
Kenneth L. Pike and Burkhard Schöttelndreyer 361

Contra-expectancy particles in Tharu Bhojpuri,
Richard D. Hugoniot. 377

Chaining and spotlighting: two types of paragraph
boundaries in Sunwar, Marlene Schulze and Dora Bieri . 389

An approach to discourse in Sunwar, Dora Bieri and
Marlene Schulze. 401

Toward the Systematization of Display Grammar

Austin Hale

The formal characterization of human linguistic competence in terms of a specification of the form of grammar has long been a central concern of transformational generative grammar. In constructing such a characterization, a great deal of importance has been placed upon the fact that no natural language currently spoken can be equated with any finite corpus. A natural result of this emphasis is the view that the grammar of a natural language consists primarily of rules, and thus that a specification of the form of grammar consists to a large extent of a specification of the rule types available for the construction of a grammar and a specification of the roles that the various rule types are allowed to play within the grammar in the generation of sentences together with their structural descriptions, and their phonological and semantic interpretations. We may accept this as a legitimate approach to a very significant set of problems without necessarily agreeing that the approach is the only legitimate one or that the problems it is concerned with are the only accessible or fruitful ones. The work reported on in this volume does not represent a rejection of rule grammar but rather an attempt to explore an alternative approach to an alternative set of problems. At times the two converge sufficiently to allow comparison, though this is not our main concern.

The exploitation of insights into the basic characteristics of rational human behavior (especially linguistic behavior) by formulating these insights as specific analytic techniques has long been a central concern of Tagmemics. Tagmemics may, in fact, be defined in terms of a certain set of characteristics that are taken to be essential prerequisites of rational human communication[2] and thus crucial to any analytic strategy for linguistic description. As a field method for language analysis, Tagmemics has few rivals. Formulaic representations are viewed more as abbreviatory conveniences than as formalizations of linguistic competence. Though the underlying behavioral characteristics which the formulae seek to capture are taken as central to the theory, the form that they take is determined more by the needs of the field worker for maintaining order in the corpus and for an arrangement of data which facilitates the discovery of recurrent patterns than by the dictates of an abstract theory which specifies the inventory of possible rule types and their interrelationships within the grammar. Analytic stability of the notational scheme takes priority over compactness and economy. Altering a formula in a grammar of types and levels often has only limited ramifications for the rest of the grammar, whereas a change to a rule in a tight and economical rule grammar will often have consequences for a large segment of the grammar. The advantages of this stability for the ordinary working linguist in a field situation should be clear--the stable system provides him a better basis for setting up his files.

Tagmemics thus understood is not only open to alternative presentation devices but has been quite productive along this line.[3] As might be expected, these presentation devices have been built upon the basic characteristics central to Tagmemics and are suggestive of analytic strategy. They do not constitute contributions to the form of grammar nor are they intended as such.

The contributions of this volume do not represent radical departures from the Tagmemic tradition. There is, however, an underlying desire to add a more explicit approach to linguistic universals to the traditional interest in analytic strategy. Given the appropriate limitation of domain,[4] there should be no theoretical objection to using the basic characteristics in an approach to the study of language universals--a study in terms of which one might eventually hope to motivate a Tagmemic form of grammar. Whether or not this view will turn out to be a notational variant of some standard theory remains to be seen.

The purpose of this paper, then, is to relate the material reported on in this volume to the basic characteristics central to Tagmemics and to analytic strategy in linguistic field work. In the introduction to Part II of this volume we will attempt to relate some of the materials of this report to linguistic universals and to their negative counterparts, which are productive of linguistic typology. In the introduction to part II the approach to analytic strategy at clause level will also be developed further.

I. BOX 4: AN APPROACH TO SYSTEMATIZATION

What do we mean by box 4? Recent work in Tagmemics[5] has led to the development of what might be viewed as a feature analysis of syntactic constructions. There are some nine kinds of information potentially relevant to any analysis of linguistic structure. A tagmeme can now be viewed as a complex symbol in which features of various kinds are used to specify the information relevant to a given analysis. These nine kinds of information are defined by a dimensional array in which the three hierarchies (grammatical, sememic, and phonological) are placed along one axis, and the three notions (function, systemic class, and item) are placed along the other axis. The cells so formed are conventionally numbered one through nine.

	Function	Systemic Class	Item
Grammatical	1 Focus	2 Category	3 Specific (Lexical) Form Cited
Sememic	4 Role	5 Conceptual Complex	6 Specific (Encyclopedic) Meaning of Cited Form
Phonological	7	8	9

Figure 1. The nine-box tagmeme.

Each of the boxes lays claim to an independent status within Tagmemics. The degree to which any given tagmeme shows redundancy among its cells is currently taken as a measure of the peripherality of the tagmeme.[6] This claim to independence can be rather simply illustrated. We will limit our discussion to the first six boxes.

1. John read a book to Sammy.
2. A book was read to Sammy by John.
3. Sammy was read to by John.

In Example 1, the grammatical function of John may be viewed as complex. It is at least the subject of the sentence. It is probably also theme of the sentence. The same grammatical function is performed in Example 2 by a book, and in Example 3 by Sammy. While John in 1, a book in 2, and Sammy in 3 share the same grammatical function, they differ in sememic function, John being an actor, a book being what we will call an undergoer, and Sammy being what we shall refer to as a site.

Examples of this sort are quite common in the literature on case grammar and tend to support the view, in whatever way it may be stated, that grammatical function and sememic function are to some extent independent. Given only the grammatical function of an item, it is not in general possible to determine the sememic function or vice versa. Boxes 1 and 4 are thus independent. Both need to be specified in some way by the grammar.

4. The noise bothered me.
5. He makes a lot of noise when he sleeps.
6. The cave gave a hollow resonance to the noise.

Given only a particular grammatical item such as noise in Examples 4 through 6, it is not in general possible to predict either the grammatical function or the sememic function that it performs. Neither grammatical nor sememic function are in general predictable strictly in terms of the identification of a citation form. Box 3 is thus independent both of box 1 and of box 4.

7. The cobbler used a steel last to make that shoe.
8. He came in last in the 100 yard dash.
9. How long did it last?

Given only a particular grammatical item, it is not always possible to make a unique specification of grammatical category or even of the specific meaning of the cited form. In Example 7, last is a noun; in 8 it is some kind of adverb; and in 9 it is a verb. In each instance it has a different specific meaning. Box 3 is thus in principle independent of boxes 2 and 6.

10. The ship was all decked out for her maiden voyage.
11. The pants were well pressed.
12. More than one of his students comes here to bowl.

Examples 10 through 12 illustrate reasons for distinguishing grammatical gender and number from their sememic counterparts. In general the semantic class or conceptual complex of a word is independent of its role in a clause, of the particular grammatical category to which it belongs, and does not uniquely predict its specific meaning. Thus there is a noun, heat, and a verb, heat, which share a great deal with one another within box 5. In box 2, however, they share relatively little in terms of their surface representation.

It will be noted that we use the notion, predicate (P), both in box 1 and in box 4. We have found no satisfactory alternative for this term, yet there are grammatical predicates which are not sememic predicates and vice versa; consequently we wish to use the notion in both boxes. The difference between sememic and grammatical predicates often surfaces in terms of disagreements as to what the verb is in clauses such as the following:

13. a) John was tall.
    b) John was angry at me.
    c) John was inclined to go.

Sememically one wishes to view the predicate as that which carries the role frame (i.e., which is strictly subcategorized by the nuclear clause constituents in some sense). In the examples of 13, the copula was clearly does not have this function. Whether a given copular clause accepts a site such as at me or a clausal complement such as to go home or neither of these is in no way determined by the verb *to be*. The words that are pivotal for the role frame are words such as *tall*, *angry*, and *inclined*. For this reason we wish to view these as sememic predicates. These words do not, however, behave like grammatical predicates. They do not inflect directly for person, number, or tense; nor do they participate directly in the modal or auxiliary constructions normally associated with grammatical predicates. For this reason we wish to view the copula *was* as the grammatical predicate in the examples of 13.

Examples of this kind lead one to conclude that box 4 is in principle independent of the other six semantico-syntactic boxes. It consists of a set of functional or relational notions relevant to the sememic interpretation of the tagmeme. On clause level, box 4 relates to those case-like relations in terms of which verbs are subcategorized.

What do we mean by systematization? A chronic practical problem for the Tagmemic field worker has been that of inventing appropriate labels for slots and for fillers. Now that we have sememic slots (box 4) as well as grammatical slots (box 1), and sememic filler classes (box 5) as well as grammatical ones (box 2), this problem promises to become increasingly acute in the absence of some kind of systematic etic framework. Our pursuit of system within box 4 started with a query. Will it eventually be possible to specify an exhaustive inventory of possible sememic relations? Could all the labels be supplied in advance? It should in principle be possible to enumerate for all languages the possible range of sememic functions on the clause level and this inventory should provide a principled basis for the selection of feature values for box 4. A linguist who was trained from such a point of view would be able to *recognize* predefined box 4 relations in any language under study and label-making would become a venture for the theorist who sought to argue for the theoretical status of a new relation rather than an ad hoc occupation of the field analyst.

A further hope was that it would be possible to relate each box 4 entry in a clause to all other possible entries in such a way as to show its place in a coherent closed system and to make clear the range of phenomena covered by each possible entry. The realization of this hope is what we mean by systematization.

Could case grammar be a systematization of box 4? Our earliest candidates for the features of box 4 on clause level were Fillmorian cases. We moved away from this starting point rather early and it may be useful to give some indication of the reasons for and the direction of this move. Fillmorian cases appeared to incorporate a great deal which is, from our point of view, non-relational. The feature of animateness was a part of the definition of certain cases.[7] From our point of view the specification of animateness belonged to box 5, and we did not wish to treat it again as part of the definition of a sememic relationship. We wished, for example, to be able to show parallelisms between the sememic relationships of subject to verb (or to clause) in examples such as the following:

14. The river washed the boulder away with a sudden torrent of water.
15. John scrubbed the dirt away with a brush.
16. The locomotive cleared the snow away with a snowplough.

In some sense, the river, John, and the locomotive are all actors and are in some sense all capable of the actions named by their accompanying verbs. Yet neither the river nor the locomotive is animate in the sense of a volitional responsible initiator and neither is personified in these instances. If these could not be agents by virtue of their inanimateness, then we would need another case, say, inanimate agent.

We wished to distinguish between the properties of particular words or sets of words on the one hand and relationships on the other. Pike noted that one way to approach this would be to look at the total range of relations a given noun could enter into with respect to its verb. We would expect that if we had the right system, most nouns would occur in most relationships at one time or another, otherwise our set of relations could be suspected of incorporating elements which should actually be analyzed as parts of the meanings of individual lexical items.

In Fillmore's case system it appears that most lexical items do not enter into the full range of case relationships. There are also rather severe apparent restrictions on the occurrent subsets of the set of cases. Nothing approaching the full set of cases occurs with any given verb in any given clause in a subcategorizing relationship to the verb. The following examples taken from Fillmore (1971:249) may be used to illustrate how our thinking was moving relative to Fillmore's analysis.

17. I am warm.
18. This jacket is warm.
19. Summer is warm.
20. The room is warm.

In Example 17, I is Experiencer. In 18, this jacket is Instrument. In 19, Summer is Time. In 20, the room is Location. It should be noted that in each instance in which the noun is concrete the sentence is ambiguous. In 17 we thus have at least two interpretations: 1) the person speaking feels warm (Experiencer), or 2) the person speaking has had his temperature taken and is warm (Object). (I'm warm according to that thermometer, but I sure feel cold.) The first person pronoun apparently lacks Instrumental, Temporal, and Locative interpretations. In 18 we find a slightly wider range of interpretations. One may use a jacket to get warm (Instrument), one may determine by using a thermometer that the jacket is warm (Object), and it may be warm in the jacket (Locative), but the jacket lacks the Experiencer relationship and the Time relationship. It might be suggested that the reason the jacket cannot be an Experiencer is that it is insentient, and the reason that it cannot occur in a Time case is that it is a concrete noun and thus is neither abstract nor temporal. We began to get the impression that the restrictions on the set of cases in which a given noun can occur may be traced to domains of meaning that we would prefer to deal with in box 5. Consider, by way of comparison, the following:

21. The water is warm.
It's warm in the water; come on in!

Water in Example 21 may be an Object, a Location, and possibly an Instrument. It fails as a Time since it is concrete and non-temporal. Restrictions on the case relations a given word can enter into seem to have a great deal to do with what a given word means. This we found uncomfortable.

Role features and the transitivity system. We propose to explore another possible approach at this point. Suppose we say that there is an attributive relationship between the subject and the predicate adjective in each of the examples 17 through 21. Suppose we call this relationship *undergoer*. By reference to features available in box 5, we can then reconstruct the experiencer relationship as that which holds between a predicate which names a sensation and a sentient noun which is its undergoer. The ambiguity is captured by the fact that *warm* may name a sensation or a relative temperature. Both are permitted as the meaning of the word; indeed, they may be expressed as part of the conceptual complex associated with the word in box 5. The ambiguity is then interpreted as lexical, not syntactic.

We have moved two steps away from a Fillmorian case system. The first step involved factoring box 5 notions out of the case system. The desirability of doing this came first to our attention in terms of the animate-inanimate distinction that existed between various cases, but later became much more general as illustrated above. The second step was to draw a line between nuclear and peripheral items that would allow only non-predictable items within the clause nucleus. Constituents that were optional and whose optional occurrence possibility could be predicted in terms of other items in the clause were tentatively excluded from the clause nucleus. (This is further discussed in Section II below.) These steps led us to the eight branch tree given in Figure 2 which we propose as a candidate system for box 4.

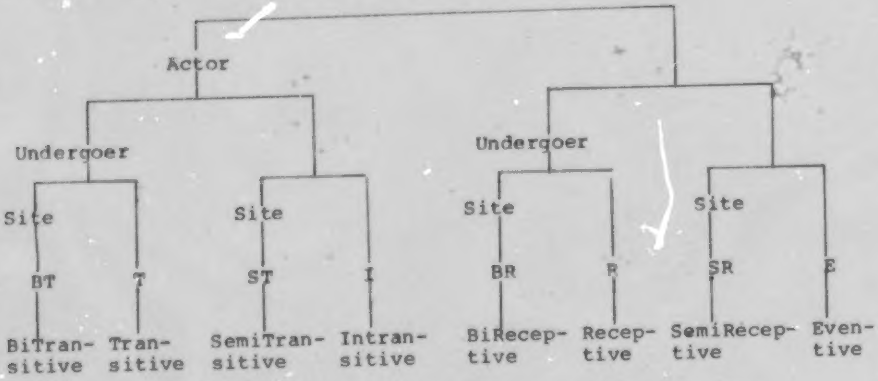

Actor
Undergoer
Undergoer
Site
Site
Site
Site
BT
T
ST
I
BR
R
SR
E
BiTransitive
Transitive
SemiTransitive
Intransitive
BiReceptive
Receptive
SemiReceptive
Eventive

Figure 2. The transitivity system as defined by role features.

Our preliminary approach derives from the fact that with each cell in the nine-box tagmeme there is an associated system which can be expressed either as a tree or as a matrix. Within this approach we posit a limited inventory of putative universal roles in terms of which languages may be comparably described and rather directly compared. We conceive of this as a conceptual space defined by role features such as actor, undergoer, and site.

The tree in Figure 2 explicitly links the role features, actor, undergoer, and site, to the notion of relative transitivity. It also entails the view that the most basic and central of the transitivity types are the BiTransitive and the Transitive. The tree explicitly exhausts its conceptual universe in terms of binary choices. The features in terms of which it is constructed are symmetrical to the system and independent of one another, allowing us to represent the same system in terms of a dimensional array to which we will refer as the transitivity matrix. Our standard matrix representation of the tree given in Figure 2 is that given in Figure 3.

	Und + Sit	Und	Sit	
Actor	BT	T	ST	I
	BR	R	SR	E .

Figure 3. The transitivity system as a dimensional array.

The relation of the role system to transitivity may be viewed informally in the following way. The highest degree of transitivity usually attributed to a clause is that of BiTransitive. Taking BiTransitive as basic to the system, we observe that BiTransitive may be defined as having three role features: actor, undergoer, and site. The rest of the system is then arrived at by establishing one transitivity type for each possible combination of the unordered subsets of the features which define BiTransitive. It now appears that one of the functions of embedding in natural language is that of preventing the formation of a clause with a higher degree of transitivity than BiTransitive. The transitivity types obtained in this way may be illustrated for Newari as follows:

22. BT: Waą jitaa saphuu bila.
Act Sit Und
He gave me a book.

23. T: Waą lāɛā dāla.
Act Und
He beat the mattress.

24. ST: Wa cheę cwana.
Act Sit
He stayed home.

25. I: Wa dana.
Act
He stood up.

26. BR: Jitaa wa lākāą̄ jila.
Sit Und
Those shoes came to fit me.

27. R: Rām khwāę jula.
Sit
Ram became deaf.

28. SR: Mirāyā tyānhula.
Sit
Myra came to feel tired.

The English gloss for Example 28 is not SemiReceptive. An English example of SemiReceptive might be

29. It got hot in the room.

The eventive pattern is not an inherent contrastive type in Newari. The following might be an example for English:

30. It rained.

where it is an empty subject fulfilling no particular role.

Inherent patterns and their derived variants. A contrastive clause pattern may be thought of as a set of verbs together with a common role frame which they govern. Since the roles in a role frame are not always obligatory, we often have a wide range of derived variants within a single clause pattern. Take as an example the BiTransitive clause,

31. He read the book to his son.
Act Und Sit

By omission of a role we may have the Transitive variant,

32. He read the book.
Act Und

or the SemiTransitive variant,

33. He read to his son.
Act Sit

or even the Intransitive variant,

34. He read.
Act

In addition to this, the passive derivation allows the set of Receptive variants:

the BiReceptive,

35. The book was read to his son.
Und Sit

the Receptive,

36. The book was read.
Und

and the SemiReceptive,

37. His son was read to.
Sit

Lacking is only the Eventive, since the verb *read* appears to disallow the empty *it* as its subject. For our purposes we wish to distinguish between *derived* variants and *inherent contrastive patterns*. A verb will be assigned to the inherent contrastive pattern which corresponds to that defined by its full complement of roles. *Read*, in the sense just illustrated, is thus BiTransitive, and each of the derived variants illustrated is viewed as a variant of the BiTransitive pattern. The derived variant BiReceptive clause in Example 35 is thus viewed as contrasting with the inherently contrastive BiReceptive clause,

38. The book was difficult for him.
Und Sit

since *difficult* does not control a frame which includes an actor.

The box 4 system at clause level and other systems. Our candidate box 4 system for clause level contains three relational role features: actor, undergoer, and site. The various combinations of these features yield the eight degrees of transitivity presented in Figures 2 and 3. These degrees of transitivity may be viewed as alternative box 4 entries for the clause as a whole, and are important to the determination of clause type.

Our candidate box 1 system for clause level contains three relational focus features: subject, object, and referent, referent being a cover term for indirect object and bound locative. The various combinations of these features can also be thought of as yielding eight degrees of transitivity, subject being the box 1 analog of actor, object of undergoer, and referent of site. In addition to this there are certain box 1 features which are assigned under focus derivations. In thematic focus we follow Halliday in distinguishing theme from rheme, and in information focus we accept his distinction of given from new.

As yet we have no candidate system for either box 2 or box 5 at clause level. These systems have yet to be studied extensively We will in the meantime, however, be using the traditional categories for box 2 (noun phrase, verb phrase, prepositional phrase, adjective phrase, adverb phrase, and the like) as well as features for such things as grammatical gender and number where these differ from natural gender and number. In box 5 we will distinguish animate and inanimate, concrete and abstract, human and non-human, natural gender, natural number, and the like.

These systems are related to one another in terms of the nine-box tagmeme. Since we are not dealing with phonology to any great extent in this volume, we will be using at most six of the nine boxes. How many of these six boxes are used will depend upon whether a given tagmeme is a terminal or a non-terminal tagmeme. Boxes 3 and 6 are used for specific cited forms. For that reason they will appear only in terminal tagmemes. Terminal tagmemes in this study will employ at the most six boxes and non-terminal tagmemes at the most four. What is treated as terminal will depend at present upon the extent of our interest in detail. Eventually, of course, when a generative interpretation is made of the scheme, full details will be uniformly and automatically provided by the rules for all units generated.

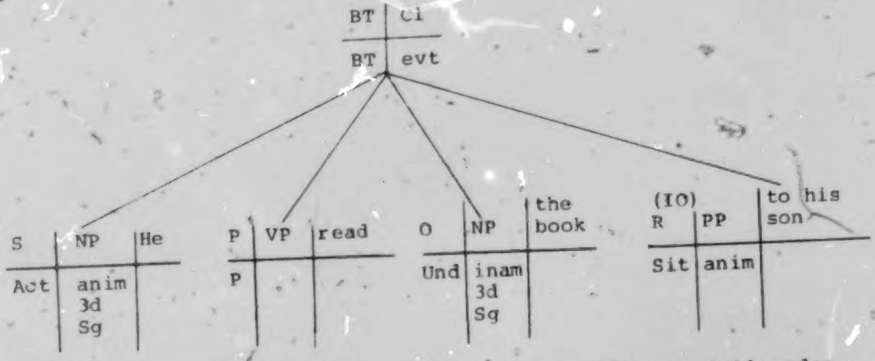

BT | Cl
BT | evt
S | NP | He
Act | anim 3d Sg
P | VP | read
P
O | NP | the book
Und | inam 3d Sg
(IO) R | PP | to his son
Sit | anim

Figure 4. Four-box non-terminal and six-box terminal nodes in a tagmemic structure tree. (S = subject, P = predicate, O = object, R = referent, IO = indirect object, NP = noun phrase, VP = verb phrase, PP = preposition phrase, Act = actor, Und = undergoer, Sit = site, anim = animate, 3d = 3d person, Sg== singular, BT = BiTransitive, Cl = clause, evt = event.)

We wish also to allow ourselves the alternative representation given in Figure 5, as well as the abbreviated representation given in Figure 6.

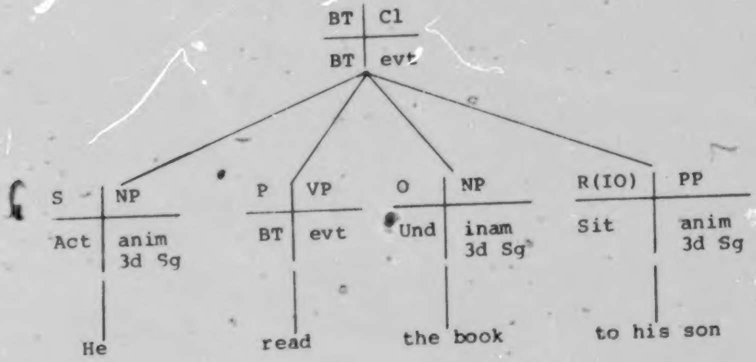

BT | Cl
BT | evt
S | NP
Act | anim 3d Sg
He
P | VP
BT | evt
read
O | NP
Und | inam 3d Sg
the book
R(IO) | PP
Sit | anim 3d Sg
to his son

Figure 5. Alternative representation of tagmemic structure tree.

BT:	Waą	jitaa	saphuu	bila	(box 3)
	S	R(IO)	O	P	(box 1)
	Act	Sit	Und	P	(box 4)
	He	to me	book	gave	(box 6, phrase by phrase)
	He gave me (a) book				(box 6, whole clause)

Figure 6. Abbreviated format of tagmemic structure tree.

We will also have occasion to use a reduced version of the abbreviation in Figure 6 from time to time.

Discourse features. Not all clauses have the same distribution within discourse. Certain clauses (or verbs) are typically stative, others are typically eventive. Our initial approach to the use of discourse features within the clause was very limited. We noted that central to the organization of narrative discourse are clauses which refer to actual overt events in past time. Such clauses make up the backbone of narrative discourse. These clauses we refer to as event (eventive) clauses. All other clauses are referred to as state (stative) clauses. There appear to be a large number of inherently eventive verbs in the languages studied and a rather small number of inherently stative verbs. By the same token there appear to be a large number of devices for stativizing inherently eventive clauses, and a relatively small number of devices for eventivizing stative clauses.

Narrative, of course, is not the only type of discourse. It is to be expected that each type of discourse will define its own backbone and hence its own set of discourse features. It is obvious that our systematization at this point is very sketchy.

Nevertheless, the state-event dichotomy was helpful in our approach to discourse-related derivations. This feature was added to the transitivity system given in Figure 3, yielding the system shown in Figure 7.

		Und + Sit	Und	Sit	
Event	Act	BiTransitive	Transitive	SemiTransitive	Intransitive
		BiReceptive	Receptive	SemiReceptive	Eventive
State	Act	BiStative	Stative	SemiStative	Descriptive
		BiAttributive	Attributive	SemiAttributive	Circumstantial

Figure 7. Transitivity matrix multiplied by one discourse feature: State vs. Event.

II. CONTRAST: AN APPROACH TO PATTERN

Evidence now available points to the possibility that most languages will have clauses with surface constituency appropriate to each of the cells in Figure 3 and to most, if not all, of the cells in Figure 7. It does not follow, however, that all languages will distinguish sixteen basic contrastive clause patterns. The notion, clause pattern, includes not only that basic, simple, relatively underived clause which most easily and clearly fits into a given cell in Figure 3 or 7, but also the total set of clauses that derive from it. The primary basis for establishing contrast among clause patterns is indeed that of role constituency. But role constituency is defined in terms of a basic form, not in terms of the total derived set. The clause 39,

39. He read.

is superficially Intransitive, but since 39 may be viewed as a reduction of a more inclusive pattern, the BiTransitive given in 40,

40. He read the book to his son.

the existence of 39 does not argue for the existence of Intransitive as a basic contrastive pattern in English. Example 39 simply forms part of the total BiTransitive pattern. Our discussion of contrast thus involves not only a discussion of contrast among role features but also a discussion of derivational patterns.

On selecting basic contrastive forms. If one views the types in Figure 2 as constituting a transitivity scale, we may say that BiTransitive is the highest on the scale and Eventive is lowest on the scale. The form we choose from a given total derivation pattern for a given verb as the basic contrastive form for the pattern as a whole should be as high on the transitivity scale as possible without having overt markings of embeddings or of derivations which allow the addition of roles to the simple basic form. (As currently formulated, our approach is quite attentive to certain characteristics of surface structure.) Another way of expressing this would be to say that where there are plus-minus options in the nucleus of a given clause type, only those examples in which all the plus options have been exercised should be viewed as basic.

In Newari, for example, a paradigm can be constructed for the verb *khwāye* 'to get cold' which includes both a BiTransitive and an Eventive clause. Consider first the BiTransitive example:

41. BT	Waą	jhiita	wa kwathā	khwāų-kā	bila
	S	R	O	P	
	Act	Ben Sit	Und	P	
	He	for us	that room	cold-cause	gave
	He made that room cold for us.				

Example 41 has overt indications of two derivations which have allowed additional roles to occur in the clause. The verb bila 'gave' is used here as a benefactive auxiliary permitting the introduction of the benefactive site jhiita 'for us.' If bila were removed, jhiita could not remain in the clause and 42 results:

42. T	Waą	wa kwathā	khwāų-kala
	S	O	P
	Act	Und	P
	He	that room	cold-caused
	He made that room cold.		

Example 42 has one overt indication of a derivation which has allowed an additional role. The verbal suffix -k identifies the clause as causative. The causative construction permits the introduction of an actor. An underlying actor would be reinterpreted as site under causative derivation. If the causative is removed, the causative actor cannot remain and 43 results:

43. R	Wa kwathā	khwāųla
	S	P
	Und	P
	that room	cold
	That room became cold.	

Example 43 betrays one further indication of derivation. Verbs in Newari which are inherently eventive have a habitual interpretation for their stative forms but a simple eventive interpretation for the past eventive tense. Verbs which are inherently stative are interpreted only as simple states in the stative form but involve arrival in a state in their past eventive tense. Example 43 has a past eventive tense and has the interpretation, arrival in a state. We therefore consider the stative form in Example 44.

44. A	Wa kwathā	khwāų.
	S	P
	Und	P
	that room	cold
	That room is cold.	

All indications to this point would favor Example 44 as the basic member of the derivational pattern. Other members of the pattern are given below.

45. E	Khwāųla.
	It became cold.

46. C Khwāų.
It is cold.

47. S Waą wa kwathā khwāųkuu.
He makes the room cold.

48. BS Wayā jhiita wa kwathā khwāųkā byuu.
He makes that room cold for us.

As is sometimes the case, khwāų participates in two different derivational patterns, either of which might in some way be derived from the other. The second pattern for khwāų is as follows:

49. BT Waą jhiita wa kwathāe khwāųkā bila.
He made it cold in that room for us.

50. ST Waą wa kwathāe khwāųkala.
He made it cold in that room.

51. SR Wa kwathāe khwāųla.
It became cold in that room.

52. BS Wayā jhiita wa kwathāe khwāųkā byuu.
He makes it cold in that room for us.

53. SA Wa kwathāe khwāų.
R P
Sit P
in that room cold
It's cold in that room.

Examples 45 and 46 may be viewed as belonging to both patterns. The second pattern lacks a SemiStative member parallel to the SemiTransitive in 50. Otherwise the two patterns differ only in that where the first pattern has an undergoer, the second pattern has a site. The basic member of the second paradigm would be 53. Tentatively we view the two paradigms as separate, but we would look for more evidence to support the view that a basic SA pattern stands in contrast to a basic A pattern in Newari. We would look especially at those verbs which participate only in a single pattern.

The initial choice of the basic member of a derivational pattern is open to modification as the analysis progresses. On our current approach, however, it is the set of role features associated with the basic members of the various clause patterns that define the major contrastive clause patterns for a language. Two simple basic clauses which contrast in terms of role features are currently taken to belong to different major clause patterns. Clauses which differ in ways other than in terms of role features are viewed as subtypes of the same major pattern.

Contrast among major patterns rests crucially upon contrast between roles or role features. To show that two roles stand in contrast, we have required that they be shown to co-occur as nuclear elements in a single clause (not simply as permitted peripheral expansions of a given type), and that they are not better analyzed as the result of conjunction, embedding, or elipsis. Placing priority on role features in this way has had the result of limiting the number of major patterns. If priority has been placed instead upon the rules required for surface structure mappings or upon specific semantic content of the variant manifestations of a given role, the number of major types recognized would have been much greater.

Contrast among nuclear roles. So far we have indicated that *contrast among roles* is established by their co-occurrence within the nuclei of basic clauses; that contrast among roles may then be used as a basis for establishing contrast between basic clauses that differ from one another in role features; and that further support for the contrastive status of various basic clauses can be gained by an examination of the total derivational paradigms associated with the basic contrastive types. What we have done so far in this section is to give one example of how a basic clause may be picked from the derivational pattern or paradigm in which it is found. Now we turn to examples of contrast among nuclear roles within individual clauses.

We may consider first certain kinds of examples that we do not wish to treat as contrastive nuclear co-occurrences of roles within the simple clause. Thus far we have found no compelling examples of two equally and independently nuclear roles within the actor complex of a simple clause.

54. John dug a ditch with a spade.

55. The spade dug a ditch.

The actor in 54 is *John*. In 55 the actor is *the spade*. In 54, however, *the spade is viewed* as a peripheral *instrument* because *the possibility of* adding an instrument to a clause depends upon the presence of an actor in the pattern. A clause with an instrument in which no overt actor occurs, such as 56, carries with it the entailment of a deleted actor.

56. The ditch was dug with a spade.

By contrast, 55 does not necessarily entail a deleted actor, and thus has a rather bizarre interpretation that is not available for 56, namely that the spade dug the ditch all by itself. In this way it can be made clear that the semantic relationship of *with a spade* to *dug* in 54 is not necessarily identical to the *semantic relationship* of *the spade* to *dug* in 55. Instruments and actors in English do *not appear* to *be* equally and independently nuclear within the simple clause. This observation appears to hold for the other languages with which we have been working as well.

Thus far we have found no compelling examples of two equally and independently nuclear roles within the undergoer complex of a simple clause. Often cited as a counter-example are clauses such as 57.

57. They elected him president.

They consider him a genius.

In each of the clauses of 57 we accept him as undergoer. The noun phrases, president, a genius, however, are traced to a complement clause embedded within the main clause. The clauses in 57 are thus reductions of those in 58.[8]

58. They elected him to be president.

They consider him to be a genius.

Thus far we have found no compelling examples of two equally and independently nuclear roles within the site complex of a simple clause. One kind of apparent counter-example that can be given is 59.

59. It seemed hot to me in that room.

Goal-site is to me. In that room is an apparent candidate for locative-site. A better analysis, however, would supply an antecedent to it, say the atmosphere. In that room then may be interpreted as a restrictive relative clause attributive to the undergoer. It would be the remains of a relative clause, the head of which had been deleted. In that room in 59 thus represents the undergoer and not a locative-site.

We turn now to a consideration of contrast among roles within simple clauses in Newari.

60.	BT	Waa̧	jitaa	kwathā	bila
		S	R	O	P
		Act	Sit	Und	P
		He	to me	room	gave
		He gave me a room.			

Example 60 qualifies as a basic member of its derivational pattern. The verb is in past tense and has the interpretation of a simple event in past time rather than that of arrival in a state; hence the verb is basically eventive. There are no derivationally linked roles that we have been able to detect. If any one of the three roles is deleted, it is entailed, or understood, not simply omitted. Actor and site are deletable in this way.

61. BR Jitaa kwathā bila.
I was given a room (understood: by someone).

62. T Waą kwathā bila.
He gave a room (understood: to someone).

63. R Kwathā bila.
A room was given (understood: by someone to someone).

The deletion of undergoer is more restricted. It occurs, for example, in specific idioms.

64. I Dewaą bila; dewaą kāla.
God gives, god takes away.

65. ST Dewaą jitaa bila.
(this fortune) is given to me by god.

Each of the three roles appears to be nuclear, each is contrastively different in its relationship to the verb and to the clause as a whole. Thus far we have found no natural set of underlying clauses into which 61 can be analyzed.

That each of the three roles is independently contrastive within a BiTransitive pattern in Newari can be shown by the existence of patterns which differ from the BiTransitive in that they occur with all but one of the roles of the BiTransitive. Given any one of the three roles, actor, undergoer, and site, it is not possible in general to predict the presence or absence of any other role or pair of roles in the clause nucleus. In Example 44 we saw that there is a clause pattern which allows only the undergoer within the nucleus. In 66 we have an example of a clause pattern which allows an actor and a site, but no undergoer.[9]

66. ST Wa cheę wana.
S S R P
Act Sit P
He home went
He went home.

In 67 we have a basic clause which has only an actor.

67. I Rām dana.
S P
Act P
Ram awoke
Ram woke up.

In 68 we have a basic clause which has only a site.

68. SA Mirāyā tyānhuu.
R P
Sit P
Mira tired
Mira is tired (Lit: Tiredness is of Mira.)

There is no contrastive pattern in Newari which has no roles, but from the examples given it can be seen that there are patterns in which only actor, or only undergoer, or only site occur; there is a pattern in which all three roles occur; and there is a pattern in which actor and site occur. As further evidence of the independent contrastive status of the roles within the clause patterns of Newari, Example 69 shows a basic clause which has undergoer and site.

69. BR Jitaa wa lākāą̄ jyuu.
R O P
Sit Und P
Those shoes fit me.

Example 70 gives a basic clause which has actor and undergoer.

70. T Waą lāsā dāla
S O P
Act Und P
He beat the mattress.

The three roles, actor, undergoer, site, can thus be viewed as features which combine independently and contrastively within the Newari clause nucleus to define a limited number of major clause patterns. The extent to which such patterning is functional within the language can be measured in part by the extent to which differences between such patterns are reflected in differences in the derivational system of the language. For an illustration of derivational patterning which supports the contrastive status of major clause patterns as discussed above, we turn to an illustration from Kham.

Contrast among derivational patterns. We have indicated roughly how contrastive co-occurrence of roles within the clause nuclei of various patterns can be used to support the independent, contrastive status of role features within the clause system of a given language. We have indicated how the combinations of such roles can be used to establish the system of clause patterns for a given language. In this section we will indicate how further support for the contrastive status of various basic clauses can be gained by an examination of the total derivational paradigm associated with these basic clauses.

We have distinguished between contrastive and non-contrastive derivations of a basic clause pattern. Non-contrastive derivations involve the exercise of plus-minus options within the clause nucleus without overt registration in the verb or elsewhere. Contrastive derivations involve more than the optional omission of nuclear roles. The difference may be illustrated from English.

71. John gave Bill a book.

72. John gave a book.

73. Bill was given a book by John

73. Bill was given a book by John.

74. Bill was given a book.

Example 71 may be taken as representing the basic clause. Example 72 is non-contrastively derived from 71 by site omission. Example 72 represents the minus option for site. Example 73 is contrastively derived from 71 by passive. The English passive derivation is contrastive in a number of ways.

71.	John	gave	Bill	a book
	S	P	R	O
	Act	P	Sit	Und
	(active)			

73.	Bill	was given	a book	by John.
	S	P	O	A
	Sit	P	Und	Act
	(passive)			

First, the box 1 functions are rotated over the box 4 functions so that *Bill* is referent-site in 71 but subject-site in 73; and *John* is subject-actor in 71 but adjunct-actor in 73 and is obligatorily marked with the preposition *by*. Secondly, this rotation is registered in the verb, the active *give* of 71 being replaced by the passive *was given* in 73. Thirdly, the passive derivation puts the derived clause 73 within the range of actor deletion, a derivation possibility not available to 71. Thus 74 is possible where 75 is in general not possible.

75. *Gave Bill a book.

The actor deletion itself, however, is non-contrastive since it involves only the exercise of a plus-minus option within the derived passive clause.

Due to the complexity of the derivational system in Kham, we will consider only the contrastive derivations of Kham and only those in which the derivations link what we now view as independent clauses. We have not yet studied in detail those subordinating derivations resulting in nominalization, adjectivalization, adverbialization, and the like. Such derivations have consequently been left out of consideration. The material for this illustration was supplied by David Watters and may also be found in a rather different form in the derivation section of his paper, Clause patterns in Kham, which appears later in this part. Since the completion of that paper, a more compact representation of constraints on derivational histories has been devised by Mr. C. M. Bandhu working in collaboration with the writer, and it is that representation rather than the tree representation used in Watters' paper that we employ for the purposes of this illustration. This more compact representation takes the form of a cyclical matrix as shown in Figure 8.

	BT	T	ST	I	BR	R	SR	E	BS	S	SS	D	BA	A	SA	C	aBR	aR	aSR	aE	
a. nUd														C							a
b. Ur														SA							b
c. Evl										T		I	BR	R	SR	E					c
d. sx-			BT	T	BT	T		aE													d
e. Ev2										T		I	BR	R	SR	E					e
f. Att													BA	A	SA	C					f
g. Ev3													*BR	*R	*SR	*E					g
h. ACv													*BT	*T		*aE					h
i. Itv	ST	I																			i
j. Bf	BT	BT																		aSR	j
k. Cv	BT	BT	BT	BT																	k
l. Pm	BT	BT	BT	BT																	l
m. Dm	S	S	S	S																	m
n. Obl	R	R	R	R																	n
o. Hab	BS	S	SS	D	BA	A															o
p. R	BR	R																			p
q. Stv	BS	S	SS	D	BA	A	SA	C											*aSA	aC	q
r. aR/gP	aBR	aR	aSR	aE					*BA	*A	*SA	*C									r
s. RUd/gP					SR	E							*SA	*C			aSR	aE			s
t. Pv/dAc	pBT	pT	pST														BR	R	SR		t
u. pStv					*BA	*A	*SA														u
	BT	T	ST	I	BR	R	SR	E	BS	S	SS	D	BA	A	SA	C	aBR	aR	aSR	aE	

Figure 8. Constraints on clause derivations in Kham. Asterisked types are exceptional. A given rule may apply only if allowed by conditions in Figure 9. A rule can apply only once in a given derivation. Rules are strictly ordered and must apply in alphabetical order with one exception: when rule m applies and when neither rules j, k, nor l have previously applied, any preceding rule can apply (following the application of m). Rules q, s, and u are automatically terminal. Rule n is designated terminal in Figure 9.

After rule	applies to	the following regular rules are blocked in the next cycle	the following exceptional rules are permitted in the next cycle
c	D or S	rules j through n, rule p, and rules t through u	
d	E	rule j	
f	any type		rules g and h
j	any type	rules k and l	
j	aE	rule t	rule q
k	any type	rules l and m	
l	any type	rule m	
m	ST or I	rule s is blocked in any following cycle	
n	any type	all rules	
o	BR or R		rule s
o	BT, T, ST or I		rule r
p	BT or T		rule u
r	BA or A		rule s
s	aSR	rule t	
t	aBR, aR or aSR		rule u

Figure 9. Constraints on successive cycles through derivations charted in Figure 8.

Figures 8 and 9 are productive of derivational histories of well-formed independent clauses in Kham. The abbreviations in the left-hand column of Figure 8 designate rules which may apply in the contrastive derivation of derived clause types from inherent clause types. Along the top and bottom of Figure 8 are input clause types. Clause types enclosed in boxes are not inherent types and can be reached only by way of derivation from an inherent type. The rules label rows in Figure 8 and the input clause types label columns, which intersect with the rows forming cells. Certain of these cells are empty, indicating that the rule which names the row involved cannot apply to the input type which names the column. Where a cell is filled with a non-asterisked form, what is indicated is that the rule which names the row is allowed to apply to the input type that names the column. The label in the cell gives the derived type which results from such a derivation. Asterisked labels are exceptional and the rules involved apply to the input types involved only under special conditions listed in Figure 9. Certain sequences of regular rules are prohibited under special conditions listed in Figure 9.

The use of Figures 8 and 9 in the generation of a derivational history is probably best explained by means of a sample derivation. We start with a basic member of some inherent clause pattern. Suppose we start with a basic Attributive clause such as that given in 76.

76.	A	bxhres	mwin.-zya.
		S	P
		Und	P
		bread	warm-present state
		The bread is warm.	

Example 76 is well formed and may stand without further derivation. Any derivation which applies to it is optional. The initial input clause, 76, is Attributive. We are thus allowed to enter Figure 8 at column A. Any rule naming a cell in column A which contains a non-asterisked form can now apply to 76. In Figure 8 we see that the cells named by rules g and h have asterisked entries. From Figure 9 we may determine that rules g and h can apply to an Attributive clause only after rule f has applied. Since no rules at all have as yet applied to 76, g and h cannot apply on this cycle. Rule s is likewise prohibited, since the prior application of rule r is required. Suppose we apply rule c, Eventivization 1, to clause 76. The result of the application of this rule is given in 77.

77.	(Ac)R	bxhres	mwin.-ke.
		S	P
		Und	P
		bread	warm-past event
		The bread warmed up.	

For a description of the rules see Watters' paper. Example 77 is a well-formed clause in Kham and the derivation may end at this point. The entry (Ac)R is an index to the derivational history of 77. It says that 77 derives from an inherent Attributive clause by way of rule c and is now a derived Receptive clause.

Having applied rule c we must leave Figure 8, and the first cycle of derivation is complete. If we wish to continue the derivation we now check Figure 9 to determine what constraints the application of rule c has imposed upon the application of rules in the next cycle. No constraints or special permissions are associated with an application of rule c to an input A, so we may move back to Figure 8 and re-enter at column R. We are free to apply the rule for any cell in column R which contains a non-asterisked form. Suppose we elect to apply rule d, which is a transitivizing rule involving the affix sx-. The application of this rule to 77 results in 78.

78.	(Acd)T	nga:	bxhres	nga-sx-mwin.-ke
		S	O	P
		Act	Und	P
		I	bread	I-transitive-warm-past event

I warmed the bread.

Example 78 is well formed. The derivation can end at this point. It will have been noticed that the derivations involved in the approach are semantically as well as syntactically operative. They clearly change meaning. In a grammar that widely separates semantic and syntactic portions of the generative process, keeping form and meaning together can present formidable problems. In the approach under consideration here, however, the usual objection to derivations with semantic effect is not really relevant. The nine-box tagmeme carries with it both form and meaning so that a change in both can economically be made at a single point in the derivation. No severe cross-referencing problem exists between the syntactic and the semantic portions of the derivation. In 78, for example, the transitivizer rule sx- added a first person actor. It added not only the form nga: but also its full sememic representation (only part of which is given here). It also added the required pronominal agreement on the verb form. The rule could in principle have picked any actor as subject at this point.

Having applied rule d, we again leave Figure 8 and the second cycle of derivation is complete. On checking Figure 9, we find no relevant constraints or special permissions for rule application on the next cycle, so we proceed to re-enter Figure 8 at column T. Column T has no asterisked entries so the rule for any labeled cell can be applied. Suppose we elect to apply rule j, the benefactive rule. A possible result of the application of rule j to 78 is given in 79.

79.	(Acdj)BT	nga:	nolay	bxhres	sx-mwin.-dx	nga-e-ke.
		S	R	O		P
		Act	Sit	Und		P
		I	for him	bread	transitive-warm-nonfinite	I-give-past event

I warmed the bread for him.

Example 79 is a well-formed clause in Kham and the derivation is free to terminate at this point.

If we continue the derivation, we will see from Figure 9 that the application of rule j has now blocked the application of rules k and l in the next cycle. Re-entering Figure 8 at column BT, we note the constraint that in general the rules in a derivational history in Kham must apply in alphabetical order. The listed exception does not cover the current derivation; thus rule i cannot apply to 79 because rule j has already applied. A violation of alphabetical order in the application of rules in the derivational history is allowed only in case the last rule applied was rule m and the rule before last was neither j nor k nor l. Since j has applied in the derivation of 79, no exception will be made even if rule m were applied in the current cycle. Suppose we do allow rule m to apply. The effect of the rule is to introduce a modal of desire as is shown in 80.

80. (Acdjm)S	nga:	nolay	bxhres	sx-mwin.-dx	e-o
	S	R	O		
	Act	Sit	Und		
	I	for him	bread	transitive- warm- nonfinite	give- nonfinite

	nga-pxyn.-zya
	P
	P
	I-want-present state

I want to warm the bread for him.

Example 80 is well formed. The derivation is free to terminate. In the event that further derivation is desired, we consult Figure 9. We discover no new constraints or permissions and are thus free to re-enter Figure 8 at column S. Since retracing through the alphabet is now prohibited, neither rule c nor rule e can apply. Since Figure 9 has not given special permission, asterisk blocks the application of rule r. The derivation is therefore terminated.

Having illustrated how Figure 8 and Figure 9 are to be interpreted, we may turn to the question of what such a representation of derivational patterning shows about contrast between clause patterns. For one thing, it should be clear that in Kham contrastive derivation radically effects the applicability of later rules in the derivation. A derived BiTransitive clause, for example, has precisely the same derivational potential as an inherent BiTransitive clause provided that no rule later than rule h has applied in its derivational history. In this sense, the fact that no two columns in Figure 8 are alike is strong evidence for contrast not only among inherent types but among their derived descendents as well.

Another way of viewing contrast in terms of Figure 8 is to look at rules which apply uniquely to certain types. Rules a and b, for example, can apply only to an inherent Attributive clause. Cycling constraints effectively prohibit these rules from applying to derived Attributive clauses. An inherent Attributive clause, once derived as (Acd)T, however, can participate in the whole set of derivations available to any Transitive clause. The set of Transitive derivations is thus a proper subset of the set of Attributive derivations in Kham. Nonetheless, at every point in this overlapping derivational pattern the derivatives of A and those of T will be overtly marked as inherently contrastive by virtue of the fact that rules will have applied in the derivational history of derivatives of A that have not applied in that of derivatives of T. This can be illustrated as follows:

78.	(Acd)T	nga:	bxhres	nga-sx-mwin.-ke
		S	O	P
		Act	Und	P
		I	bread	I-transitive-warm-past event
		I warmed the bread.		

81.	T	nga:	zihm	nga-jxy-ke
		S	O	P
		Act	Und	P
		I	house	I-build-past event
		I built a house.		

The difference between the inherent and the derived T is clearly marked by the fact that the derived T has the transitivizing prefix *sx-* where the inherent transitive lacks this suffix.[10]

III. DISCOURSE: APPROACHES TO THE STRUCTURE OF SPEECH ACTS.

Discourse structures are not yet as accessible to systematization as are clause structures. Nevertheless, a number of approaches to the study of discourse were made during the course of the workshop.

A notational approach. Appropriate notational conventions are of great practical importance at all stages of linguistic analysis. Approaching the structure of text from the point of view of hierarchy and the nine-box tagmeme, Schottelndreyer and Pike have given an example of both linear and tree representations of text. The fact that many questions of analysis had to be left open may be interpreted as evidence of the value of the approach. The questions which the notational scheme raises are central to any analysis of text and can be taken as a beginning strategy in approaching discourse structure. A sample of this approach can be seen in Burkhard Schottelndreyer and Kenneth Pike, Notation for simultaneous representation of grammatical and sememic components in connected discourse, in this part.

An experimental approach. Evidence for the reality of paragraph structure in the early stages of analysis is often difficult to obtain. Pike and Schottelndreyer have developed a technique that promises to make one aspect of the evidence more accessible to early analysis. If paragraphs have reality, one would suppose that a text could survive only so much sentence permutation before losing its coherence. After a certain amount of permutation of sentences, the mechanisms of a language which compensate for such changes of order can no longer compensate for the skewing of grammatical sequence with respect to sememic sequence. Narratives, for example, are usually given coherence in terms of the relationship of discourse elements to a chronological chain of events. When an event is told out of sequence, this fact must be overtly signalled in some way if both coherence and the meaning of the message are to be preserved. In experimenting with sentence permutation within texts, Pike and Schöttelndreyer found that certain points in a text were highly resistant to successive permutations while other stretches were not. These resistant points correlated closely to what would intuitively be chosen as paragraph boundaries. An account of this approach may be found in Kenneth Pike and Burkhard Schöttelndreyer, Paired-sentence reversals in the discovery of underlying and surface structures in Sherpa discourse, in this part.

Speech acts: goals to achieve with words. A third approach represents an attempt to identify major functional components of discourse. This approach builds to a large extent upon Grimes, 1972.

We start by assuming that an understanding of the speech act is basic to an understanding of language use. We assume that there are linguistically describable regularities that help characterize the difference in any given language between an effective speech act and an ineffective one. We have found it helpful in coming to an understanding of discourse structure in various languages to assume that there are certain things one can do with words. One can decide to impart information, to elicit information, to convey a command, to express a wish, to give advice, to promise something, or to perform any one of a number of other speech acts. If one is to accomplish any such speech act one must in some way make it clear to his hearers what speech act he is engaging in. If a speaker attempts to impart information while his hearers are under the impression that he is expressing a wish or giving advice, communication will fail even though the hearer may have understood every word. If a speaker attempts to convey a command and his hearers are under the impression that he is eliciting information, the speech act will be ineffective, and communication will have failed. We assume, then, that there are clues which enable hearers to identify speech acts correctly and that these clues are accessible to linguistic analysis. The fruitfulness of this assumption has begun to be apparent both in the study of Sunwar and of Tharu Bhojpuri.

Topic-development types: strategies for acting with words. Given the choice and identification of a speech act, one is free to choose a topic and a development type. There are certain ready-made strategies for each language in terms of which topics are developed. We assume that for any given speech act there are constraints on the choice of strategies for development, though these constraints are certainly not unique pairings. If one were to characterize a given development type in English, for example, as consisting of a string of rhetorical questions followed by a string of imperatives, one might immediately visualize a hortatory speech act such as the following one:

82. What do you mean by taking my ruler? Don't you know that I need it? Next time ask permission when you take it and put it back when you're finished.

On the other hand, a superficially very similar development type can be used to inform:

83. So you want to know how to get to Kathmandu from here, do you? Well, go down this road until you come to the bus stop. Then take the next left. Go down the hill. Do you see a red gate at the bottom of the hill? When you do, turn left...

One could distinguish the two in terms of the kinds of imperatives involved. Example 82 has real imperatives where Example 83 has rhetorical imperatives. Nevertheless we do not assume any one-to-one relationship between speech acts and development types, any more than we assume unique pairings of sentence level mood with speech act. There do appear to be constraints on such pairings. It is not immediately obvious, for example, how one could use the general development type of 82 or 83 to pronounce a blessing in English.

Effectiveness conditions: *coherence*. We assume, furthermore, that there are at least three kinds of effectiveness conditions on any given development type. We will refer to these as *coherence* conditions, *significance* conditions, and *background conditions*. How these conditions are met depends to some extent upon the speech act and to some extent upon the development type chosen. If one chooses to impart information (or entertain) and chooses a narrative development of some topic to do so, coherence constraints are met or not depending upon whether there is a sequence of events which is coherent in time, in place, and to some extent with respect to the participants involved. Such a sequence, which guarantees coherence, we refer to as the *backbone* of a given development type.

Different development types may be distinguished according to differences in coherence constraints, that is, in terms of differences among the characteristics of their backbones. One may, for example, contrast the narrative development with its constraints on coherence of temporal sequence, local sequence, and cast with the hortatory development in which time and place may play no essential coherence role, but in which coherence is attained by a hortatory development of a series of related points where the role of the hearer as prospective performer in the cast is constant.

It is usually the case that there is material other than backbone material in any given monologue. In a narrative, one may describe the setting, introduce the participants, inject editorial comments at various points, relate various backstage developments, various subjective and cognitive experiences that do not form part of the chain of events that constitutes the backbone. If the monologue is to be perceived as coherent, the backbone must be distinguished in some way from these other elements. We assume that there are clues which enable hearers to identify the backbone and to distinguish it from other material in the monologue. The fruitfulness of this assumption is beginning to show in the analysis of Sunwar discourse.

Effectiveness conditions: significance. We have mentioned three kinds of effectiveness conditions, those relating to *coherence*, those relating to *significance*, and those relating to *required background*. A narrative can be coherent and pointless. Labov and Waletzky, 1967, have linked significance to evaluative statements in narrations of personal experience. Our guess is that any kind of monologue can be either pointless or significant and that the difference between pointlessness and significance can be at least partly determined by the presence or absence of materials analogous to evaluative material in the narration of personal experience, and that these materials will relate closely to the speech act or to the purpose of the monologue. What elicited the evaluative material in Labov's interviews was a challenge, implicit or explicit, to demonstrate the seriousness of an incident. This represented a kind of complication or provocation that the evaluative material answered. We expect, then, to find that significance is related to a line of tension that runs between a complication, problem, or provocation of one sort or another which occurs either prior to or at the beginning of a monologue, on the one hand, and a climax, resolution, solution, evaluation or the like that answers to it, resolving the tension, releasing the hearer, and signalling the beginning of the end of the monologue on the other. We assume that there are clues which enable hearers to identify material of this sort and thus to be able to distinguish it from the backbone. We refer to material which is directly related to the point of the monologue in this way as the *focal content* of the monologue. The usefulness of these assumptions are also indicated in the Sunwar materials.

Effectiveness conditions: background. A narrative can be coherent and significant and yet a given audience may fail to grasp the coherence or appreciate the significance of the narrative due to gaps in background. Material which insures that a given audience will follow a monologue and get the point, but which itself is neither backbone nor focal content, we refer to as *tributary material*. Tributary material performs many specific functions and is a candidate for considerable sub-classification. What constitutes tributary material in any given monologue, however, appears to depend crucially upon the speech act and possibly upon the development type in which it occurs. Material, which identifies the setting or which introduces and describes the cast may well be tributary in an event narrative. In a travel narrative, indications of time and place may form an important part of the backbone. In a character study, the development of cast may be part of the backbone. One cannot easily assume that any given type of material will always function as tributary material, but it does seem likely that for any given speech act there will be material that performs the function of insuring that the intended audience has the background to appreciate the coherence and significance of that speech act. A converse study could also be made. Minority languages are often employed as secret languages to exclude all but the intended audience, Newars claim that it is relatively easy to exclude non-native speakers of Newari, otherwise fluent in the language, whenever desired. The strategic omission of background material not required undoubtedly plays an important role in this particular use of language.

For a specific application of these assumptions to the study of discourse in a particular language, see Dora Bieri and Marlene Schulze, An approach to discourse in Sunwar, in this part.

Sentence patterns and where they fit. Dora Bieri, after a considerable portion of the paper she was working on with Marlene Schulze had been completed, conducted an interesting experiment in Sunwar in order to get some idea of the importance of complex sentence structure to Sunwar discourse. She took a number of effective monologues and converted them to sequences of simple independent clauses with the result that the monologues were rendered highly ineffective. What was the reason for this? In Sunwar the identification of paragraph type is often marked in the initial subordinate clause of the paragraph. A monologue-initial subordinate clause can often be used to identify the entire speech act, just as in English the use of the formula 'once upon a time...' prepares the hearer for a fairy tale. A number of these markers are expressible in Sunwar only in subordinate clauses, since they occur in mutually exclusive distribution with the finite endings on verbs that are required in independent clauses. Thus in many cases paragraph types cannot be identified if discourse is restricted to simple independent clauses.

In Sunwar there is extensive use of chaining (He went to the market. Having gone to the market...). At certain points the presence or absence of chaining and the type of chaining used are crucial clues to the identity of the speech act and consequently of the backbone. Chaining of this sort required complex sentence structure. Sentence, as a level in Sunwar distinct from either paragraph or clause, is, for this kind of reason, not at all difficult to maintain.

For a brief study of the use of subordinate clauses as discourse links, see Marlene Schulze and Dora Bieri, Chaining and spotlighting: two types of paragraph boundaries in Sunwar. For more detailed studies of sentence structure without specific reference to discourse function, see Maria Hari, Tentative systemic organization of Nepali sentences, and Alice Davis, Maithili sentences, in this part. For further discussion of the considerations which guided the research of Hari and Davis, see Ronald Trail, 1973.

REFERENCES

Austin, J. L. 1962. How to do things with words. the William James Lectures delivered at Harvard University in 1955, ed. by J. O. Urmson. New York: Oxford University Press.

Chomsky, N. A. 1965. Aspects of the theory of syntax. Cambridge: The M. I. T. Press.

Fillmore, Charles J. 1968. The case for case. Universals in linguistic theory, ed. by E. Bach and R. T. Harms, 1-90. New York: Holt, Rinehart, and Winston.

________. 1971. Some problems for case grammar. Working papers in linguistics No. 10, August 1971, ed. by C. J. Fillmore, 245-265. Columbus: Department of Linguistics, The Ohio State University.

Grimes, Joseph E. 1972. The thread of discourse (technical report no. 1, National Science Foundation grant CS-3180). Ithaca: Department of Modern Languages and Lingustics, Cornell University.

Halliday, M. A. K. 1967. Notes on transitivity and theme in English, parts 1 and 2. Journal of Linguistics 3.37-81, 199-244.

________. 1968. Notes on transitivity and theme in English, part 3. Journal of Linguistics 4.179-215.

Klammer, Thomas P. 1971. The structure of dialogue paragraphs in written English dramatic and narrative discourse. University of Michigan Ph.D. dissertation.

Labov, William and Joshua Waletzky. 1967. Narrative analysis: oral versions of personal experience. Essays on the verbal and visual arts, proceedings of the 1966 annual spring meeting of the American Ethnological Society, ed. by June Helm, 12-44. Seattle: University of Washington Press.

Lowe, Ivan. 1969. An algebraic theory of English pronominal reference, part I. Semiotica 1.397-421.

Pike, Kenneth L. 1964a. A linguistic contribution to composition, a hypothesis. Conference on College Composition and Communication, May 1964, 82-88.

________. 1964b. Beyond the sentence. College Composition and Communication, October 1964, 129-135.

________. 1965. Non-linear order and anti redundancy in German morphological matrices. Zeitschrift für Mundartforschung 32.193-220.

________. 1972. Recent developments in Tagmemics. Paper presented at the XIth International Congress of Linguists, Bologna, 28th August, 1972.

________ and Gillian Jacobs. 1968. Matrix permutation as a heuristic device in the analysis of the Bimoba verb. Lingua 21.321-345.

________ and Ivan Lowe. 1969. Pronominal reference in conversation and discourse: a group theoretical treatment. Folia Lingustica 3.68-106.

Searle, John R. 1969. Speech acts, an essay in the philosophy of language. Cambridge: Cambridge University Press.

Trail, Ronald L. 1973. Patterns in clause, sentence, and discourse in selected languages of India and Nepal. Summer Institute of Linguistics publications in linguistics and related fields, 41.

Wise, Mary Ruth. 1971. Identification of participants in discourse: a study of aspects of form and meaning in Nomatsiguenga. Summer Institute of Linguistics publications in linguistics and related fields, 28.

FOOTNOTES

[1] This paper grows out of a workshop held in Nepal during the academic year 1971-72 under the project direction of Kenneth L. Pike. Had it not been for the stimulation and encouragement of Kenneth and Evelyn Pike, the development which this paper sketches out would never have taken place. It should not be assumed, however, that they would agree with everything presented in this paper. The writer also wishes to express his appreciation to the following individuals for stimulating comments and supporting data: David Watters (Kham), Burkhard Schötteldreyer

(Sherpa), Ross Caughley (Chepang), Dora Bieri and Marlene Schulze (Sunwar), Doreen Taylor (Tamang), Gary Shepherd (Magar), Chura Mani Bandhu (Nepali), Thakurlal Manandhar (Newari), Uwe Gustafsson (Kotia), Jennifer Williams and Alice Davis (Maithili), Esther Strahm (Jirel), Kent Gordon (Dhangar), and Ronald L. Trail. Of these languages, Kotia is a language of India. All the others are spoken in Nepal.

The research leading to this paper was sponsored in part by the Institute of International Studies, U. S. Department of Health, Education, and Welfare under contract No. OEC-0-9-097721-2778 (014). The paper is a revised and expanded version of a paper presented at the XIth International Congress of Linguists, August 28, 1972, in Bologna, Italy.

[2] Pike (1964a, 1964b) has discussed these basic characteristics. We attempt to summarize them briefly here, though in a slightly different order. The characteristics come in four sets. The first set, UNIT, embodies the claim that the ability to segment reality into units is an invariant that underlies all of human experience. Rational communication would be impossible if it were not possible to segment experience into events and entities which can be remembered and referred to. Rational communication would be equally impossible were it not possible for a speaker to distinguish one phoneme of his language from another. For a unit to exist or be well described, it must be possible to say how it differs from other units (*contrast*: feature mode), how it is variously manifested (*variation*: manifestation mode), and how it is distributed (*distribution*: distribution mode) in regard to class membership, in regard to function in a sequence, and in regard to relationship to its total context.

A second set, HIERARCHY, embodies the claim that the ability to produce and understand messages that are simultaneously structured in at least three different ways is an invariant condition upon all rational human communication. In face-to-face communication, messages typically have *Phonological*, *Grammatical*, and *Sememic* structures, none of which are entirely reducible to either of the other two. (In this respect Tagmemics stands closer to the standard theory of Chomsky, 1965 than to Generative Semantics.) If one were to remove any one of these three sets of constraints, say, on spoken English, rational human communication would no longer be possible by means of the resultant linguistic system.

A third set, CONTEXT, embodies the claim that if language were totally divorced from its non-linguistic context, whether social or physical, rational human communication would fail. (In insisting that a description of context belongs in principle to a description of language, Tagmemics is far closer to Generative Semantics than it is to the standard theory.) This set also includes three sub-characteristics. There is no form without meaning and without form there is no meaning (Form-Meaning Composite). Linguistic entities influence one another only if they share a feature or some point of contact (Shared Components as a Bridge for Change). The interpretation of linguistic form depends upon linguistic and social context (Universe of Discourse). If forms had no meaning or if meanings lacked forms for their expression; if non-contiguous linguistic elements effected variation in other linguistic elements with arbitrary relative distributions; if social or linguistic context were not available in the interpretation of linguistic form; or if linguistic form could in principle not be interpreted in the light of either linguistic or non-linguistic context, then rational human communication as we know it would fail.

A fourth set, PERSPECTIVE, embodies the claim that there are three perspectives required both for rational human communication and for its description. No single perspective allows all the relevant regularities to be stated. The three perspectives are Particle, Wave, and Field. Without particle one could not choose to view anything as a unit. Without the particle perspective no description could be made of units such as phonemes, morphemes, or idioms. Without wave one could not choose to view a sequence of units as a string or conceive of a process or the path of a moving object. No description of sequences would be possible. Without field, one could make no use of context, of feature composition, of taxonomy, and a description of such things as paradigms would not be possible.

Each of the perspectives has a normal pairing with one of the other three sets. The perspective normal to units is that of particle. The perspective normal to hierarchy is that of wave. The perspective normal to context is that of field. One can, however, choose a non-normal perspective in each of these cases.

A noun may be viewed as a unit in contrast with other nouns, having its own set of phonetic representations, its own limited distribution, its own meaning. A noun may change over time or undergo phonological contraction in a sequence, facts which indicate our ability to view it as a wave. A noun has a paradigm, it has a feature composition isomorphic to its location in the various taxonomies in which it participates, it is defined partly in terms of complex contextual relations which indicate our ability to view it as a field. The human ability to shift perspective is crucial to rational human communication.

Consider also the following:

a) The house collapsed.
b) The house was a battlefield strewn with bottle tops.
c) He bought the house.

In a) it is necessary to understand house as a wave. If house could not be understood in this way the sentence would be nonsense since once the house has collapsed it is no longer a house but a ruin. As a wave we can have a collapsed house or a house that was torn down last year. With *house* as a particle only, such collocations are anomalous. In b) it is necessary to understand *house* as a field, otherwise it is impossible to grasp the idea that *house* is focussed upon as a context for the distribution of bottle tops. In c) we need to be able to understand *house* as a unit.

[3] The following come immediately to mind as examples of Tagmemic presentation devices. The matrix material of K. L. Pike, 1965; of Pike and Jacobs, 1968; of Pike and Lowe, 1969; and of Lowe, 1969.

[4] Limitations of domain required for such study are not given in Tagmemic theory but result from the primary interest of the investigator. Tagmemics sees no rigid boundaries in terms of which linguistics can be fenced off from other disciplines.

[5] See especially Pike, 1972; Klammer, 1971; and Wise, 1971. Our presentation of the nine-box tagmeme grows out of recent work of Pike.

[6] This can be illustrated in terms of a tentative analysis of *yesterday* in the following two examples:

a) Yesterday he went to find his brother.
b) Yesterday was a rainy day.

In a) *yesterday* is peripheral, does not subcategorize the verb, and shows considerable redundancy among the representations in boxes 1, 2, and 5.

Time Adjunct	Time Adverb	Yesterday
	+ abstract + time	

We have left box 4 blank since we have not yet approached the problem of box 4 entries for peripheral items in any systematic way. Presumably its function is to mark time setting. It may well be that peripheral items are derived by sentence demotion. Example a) may come from a sequence something like c).

c) It was yesterday. He went to find his brother.

If such derivations can be maintained, we will need to come to some explicit understanding of how such derivations assign values to the resultant derived tagmemes. It may be that the redundance which is characteristic of peripheral tagmemes is a result of the operation of demotion rules that have applied in their derivation. In b), yesterday is nuclear and shows much less redundancy.

Subject Theme	Noun	Yesterday
Undergoer	+ abstract + time	

[7] See Fillmore, 1968:24. Animateness is typical of Agentive and Dative. Inanimateness is typical of Instrumental. In Fillmore, 1971:251, there is a hint that Fillmore has somewhat revised his own views of the relevance of animateness specifications for cases, though the continued existence of cases like Experiencer seems to indicate that we still have cases typically marked for animateness within case grammar.

[8] The following is a more difficult example:

a) They called him Bill.

Our tentative analysis is that him is a site and Bill is the undergoer. Example a) would then form an exception to the normal surface mapping rules for goal-site since b) is not allowed, at least not as a version of a).

b) *They called Bill to him.

Another example points to the desirability of recognizing complex lexical sources for certain verbs.

c) They named him Bill.

Example c) may well come from something like d).

d) They gave him the name Bill.

where him is goal-site, and the name Bill is an appositional construction which functions as undergoer.

[9] We may eventually wish to say that the actor in 66 is also the undergoer. In that case, what Example 66 shows is that the clause pattern allows no independent undergoer in addition to the actor. This may be a general characteristic of Intransitive and SemiTransitive clauses.

[10] For a more extensive sample of Kham clause derivations, see David Watters, Clause patterns in Kham, in this part. For a more extensively illustrated chart of derivational histories such as that given in Figures 8 and 9, see C. M. Bandhu, Clause patterns in Nepali, in part II of this volume.

Clause Patterns in Kham

David E. Watters

CONTENTS

I. INTRODUCTION 41

II. BASIC PATTERNS 42
   A. The Contrastive System 42
      1. The Nominal Role Marker System in Kham. 42
      2. The Verbal Role Marker System in Kham 51
      3. The Focus Marker System in Kham 57
   B. Systemic Contrast. 71
      1. General Contrasts 71
      2. Specific Contrasts. 78
      3. Derivational Contrasts. 79
   C. Contrastive Types. 81
      1. BiTransitive Clause Type. 81
      2. Transitive Clause Type. 82
      3. SemiTransitive Clause Type. 84
      4. Intransitive Clause Type. 85
      5. BiReceptive Clause Type 86
      6. Receptive Clause Type 86
      7. Stative Clause Type 88
      8. Descriptive Clause Type 88
      9. BiAttributive Clause Type 88
      10. Attributive Clause Type 89

III. INFLECTED PATTERNS. 91
   A. Inflectional Categories. 91

1. Mood 91
2. Person 91
3. Number 91
4. Voice. 92
5. Tense. 92
6. Aspect 92
7. Modality 92
8. Editorials 93

B. The Verbal Phrase Surface Structure 93

C. Obligatory Elements of the Verbal Phrase. 94
1. Verb Form. 95
2. Person and Number in Active Verb Forms 95
3. Tense in Active Verb Forms 99
4. Person and Number in Passive Verb Forms. 101
5. Tense in Passive Verb Forms. 102
6. Exceptions to the Passive Interpretation of Passive Verb Forms 103

D. Optional Expansions of the Verbal Phrase--Affixes 104
1. The Affix ma-. 104
2. Aspect Affixes 108
3. The Potential Modal Affix. 109

E. Optional Expansions of the Verbal Phrase--Auxiliaries 110
1. Perfective Aspect Auxiliary. 110
2. Passive Perfective Aspect Auxiliary. 110
3. Unrelentive Aspect Auxiliary 111
4. Conjecture Modal Auxiliary 111

F. Optional Expansions of the Verbal Phrase--Post-Verbal Particles. 111
1. Post-Verbal Particles Which Occur Only with Active Verb Forms. 112
2. Post-Verbal Particles Which Occur Only with Passive Verb Forms 113
3. Post-Verbal Particles Which Occur with Either Active or Passive Verb Forms 114

G. Mood. 116
1. Interrogative Mood 116
2. Imperative Mood. 117
3. Hortative Mood 120
4. Optative Mood. 121

IV. DERIVED PATTERNS. 122

A. Non-contrastive Rules 124
1. Non-contrastive Undergoer Deletion (nUd) 124
2. Undergoer Replacement (Ur) 124

B. Contrastive Rules 126
1. Addition Rules 126
2. Deletion Rules 128
3. Altering Rules 134
4. Embedding Rules. 135
5. Shifting Rules 144

C. Possible Derivations. 147
1. Summary of Possible Derivations. 149
2. Selected Illustrations of Derivations. 152

V. DEPENDENT PATTERNS 184
  A. Modal Embedding 185
  B. Relative. 185
  C. Time. 187
  D. Sequence. 188
  E. Condition 188
  F. Purpose 189
  G. Adversative 189

REFERENCES 189

FOOTNOTES. 190

APPENDICES 197
  A. Abbreviations 197
  B. Constraints on -lay As an Undergoer Marker. 199

I. INTRODUCTION

The purpose of this paper is first of all to provide some materials on the Kham language as it is spoken in the Taka-Sera area of the Dhaulagiri and Rapti Zones of Western Nepal. Secondly, the same material may be useful for grammatical comparison across various languages in Nepal, especially within the group of Tibeto-Burman languages.

Mr. Hasta Ram Buhda, 46 years of age, has served in the capacity of language assistant. I am indebted to him for his excellent help in gathering and checking the data on which this analysis is based. Mr. Buhda was born in Taka, a village in the Baglung District of the Dhaulagiri Zone, and is still a resident of that village.

I am very much indebted to Dr. Kenneth L. Pike for providing the theoretical background of this paper. I am also indebted to Dr. Austin Hale who provided the basic approach, gave encouragement through numerous comments on the analysis and the writing, and willingly read and criticized earlier drafts of this paper.[1] I am very grateful for frequent stimulating discussions with the following colleagues: Mr. C. M. Bandhu, Miss D. Bieri, Mr. R. Caughley, Mr. K. Gordon, Mr. B. Schöttelndreyer, Miss E. Strahm, and Miss J. Williams.

This work was done pursuant to an agreement of cooperation between the Summer Institute of Linguistics and Tribhuvan University and has been carried out under the auspices of the Institute of Nepal Studies of the University. The author wishes to express his gratitude to the Institute of Nepal and Asiatic Studies for their part in making this research possible.

This paper was in part supported by a grant from the U. S.

Office of Education, Washington, D. C., under contract number OEC-0-097721-2778 (014). This paper has benefited also from a computor concordance of Kham texts processed at the University of Oklahoma in a program supported by NSF Grant GS-1605.

II. BASIC PATTERNS

A. The Contrastive System

1. The Nominal Role Marker System in Kham

All contrastive clause patterns in Kham emerge from a transitivity system which has been defined in terms of the possible combinations of the three primary roles--actor, undergoer, and site. Such combinations result in the following matrix of eight cells illustrated in Figure 1.

	Und-Sit	Undergoer	Site	
+Actor	Bi-Transitive	Transitive	Semi-Transitive	Intransitive
-Actor	Bi-Receptive	Receptive	Semi-Receptive	Eventive

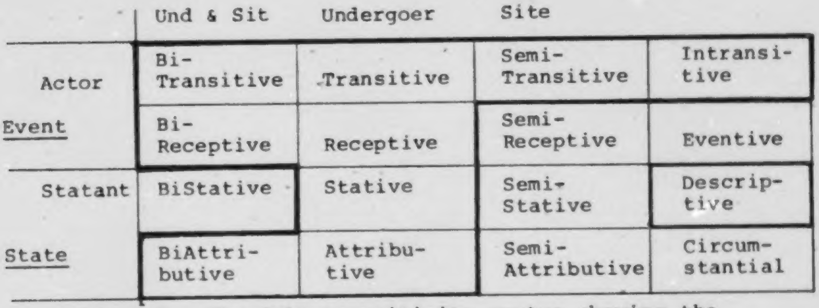
Figure 1. The transitivity matrix.

Each of these three roles may be viewed as corresponding to a set of case relations. The roles are central to the sememic classification of clause patterns. They are also central to a description of the sememic effect of optional rules in the derivational history of a clause. In general, it is hoped that the three primary roles would include those cases that strictly subcategorize the verb and that the secondary roles would include those peripheral, case-like elements which partially subcategorize clauses.

The purpose of this section is to show how the three primary roles are marked in Kham. The recognition of a marker difference between a pair of clauses is often quite straightforward, involving little more than the recognition of morphological markers on the noun phrases of the clause nucleus. The recognition of a clause nucleus upon which the assignment of a marker difference rests may be considerably more involved. However, we shall define the clause nucleus as consisting of the verb and those roles which strictly subcategorize the verb and thus define its place in the transitivity system. The terms of each of the two systems--morphological markers and clause nucleus--are involved in the definition of the terms of the other. Without recourse to roles such as actor, undergoer, and site, we would find it very difficult to say, in terms of our current views, what we mean by the labels Receptive, BiReceptive, Intransitive, Transitive, and the like. Similarly, without recourse to clause nuclei, it would be quite difficult to sort out the markers used to signal the various roles in the Kham clause.

As stated earlier, the basic transitivity system has been defined in terms of the possible combinations of the roles actor, undergoer, and site. By taking into account, however, certain other considerations, it becomes evident that all Kham verbs are inherently divided into the two major categories state and event. For example, the tense marker -zya on state verbs indicates a present progressive change of state. (See II.B.1a for further contrasts.) In addition, certain information growing out of the organization of a narrative discourse gives further rationale for the separation of clause types in Kham into the categories state and event. An event in a narrative discourse is typically given in the past tense, whereas negatives, modals, and non-indicative moods are typically given in stative tenses.

If the distinction between state and event is added to the transitivity system, the transitivity matrix is doubled. Figure 2 illustrates the full transitivity system, with each cell labelled for reference throughout this paper. We shall also refer to sets of clause types as represented by each of the horizontal rows in Figure 2: row 1 being the transitive set, row 2 the receptive, row 3 the stative, and row 4 the attributive set.



	Und & Sit	Undergoer	Site	
Actor	Bi-Transitive	Transitive	Semi-Transitive	Intransitive
Event	Bi-Receptive	Receptive	Semi-Receptive	Eventive
Statant	BiStative	Stative	Semi-Stative	Descriptive
State	BiAttributive	Attributive	Semi-Attributive	Circumstantial

Figure 2. The full transitivity system showing the distinction between state and event. (Solid lines enclose those clause types which are inherent in Kham.)

The correlation between markers and roles is basic to the identification of contrastive clause patterns in Kham. Figures 3 through 16 summarize the normal markers for the nuclear roles of actor, undergoer, and site within each of the transitivity patterns. Cells in which a given role cannot occur (by definition of the transitivity system) are marked by three hyphens. Cells for which no appropriate example of a given role has been found are marked by empty parentheses. Blank cells represent clause types which are not inherent contrastive patterns in Kham. (See Appendix A for key to abbreviations.)

1a. Actor markers

BT Agt* Umk**	T Agt* Umk**	ST Umk	I Umk
BR ---	R ---	SR	E
BS	S Agt* Umk**	SS	D Umk
BA ---	A ---	SA	C

Figure 3. Normal actor markers for animate or inanimate actors. *3rd person actors
**1st & 2nd person actors.

In the following examples the letter M indicates markers, and the letter R indicates roles.

Examples.

BT		nga:	no-lay	bxhtanji	nga-e-ke
	M	Umk	Gol	Umk	P
	R	Act	Sit	Und	Evt

I gave a potato to him.

BT		no-e	nga-lay	bxhtanji	ya-n.-ke-o
	M	Agt	Gol	Umk	P
	R	Act	Sit	Und	Evt

He gave a potato to me.

T		nga:	zihm	nga-jxy-ke
	M	Umk	Umk	P
	R	Act	Und	Evt

I built a house.

T		no-e	zihm	jxy-ke-o
	M	Agt	Umk	P
	R	Act	Und	Evt

He built a house.

ST	no:	thala-tin	zo:-ke
M	Umk	Loc	P
R	Act	Sit	Evt

He jumped from the roof.

I	no:	so-ke
M	Umk	P
R	Act	Evt

He got up.

S	nga:	zihm jxy.o	nga-pxyn.-zya
M	Umk	(embedded)	P
R	Sta	(Und)	State

I want to build a house.

S	no-e	zihm jxy.o	pxyn.-zya-o
M	Agt	(embedded)	P
R	Sta	(Und))	State

He wants to build a house.

D	no:	nx-kx ba ba	ngxmsi-zya
M	Umk	(embedded)	P
R	Sta	(Cpl)	State

He enjoys going there.

There is one exception to Figure 3. Where 1st and 2nd person actors are manifested by nouns and not pronouns, they are agent marked in S, T, and BT clauses. Consider the following example:

T	ge:	mi:ra-e	u:-rx	ge-ra-nga-e
M	pro	Agt	Umk	P
R	Act		Und	Evt

We men raise hogs.

1b. Undergoer markers

Examples.

BT	no-e	nga-lay	ka:h	ya-n.-ke-o
M	Agt	Gol	Umk	P
R	Act	Sit	Und	Evt

He gave a dog to me.

BT	no-e	ho	pxysa-lay	bagul-lx	ja:h-ke-o
M	Agt	Gol		Loc	P
R	Act	Und		Sit	Evt

He put that money into the chicken nest.

BT Gol* Umk**	T Gol	ST ---	I ---
BR Umk	R Umk	SR	E
BS	S Umk	SS	D ---
BA Umk	A Umk	SA	C

Figure 4. Normal undergoer markers for specific undergoers. (See Appendix B for discussion of specific undergoers.) *with locative site **with goal-marked site

T		no-e	ka:h-lay	poh-ke-o
	M	Agt	Gol	P
	R	Act	Und	Evt

He beat the dog.

BR		ram	bxjar-lx	ngoy-ke
	M	Umk	Loc	P
	R	Und	Sit	Evt

Ram got lost in the bazaar.

R		nga:	nga-kxre:-ke
	M	Umk	P
	R	Und	Evt

I became hungry.

S		ram-e	nx-kx ba-o	pxyn.-zya-o
	M	Agt	(embedded)	P
	R	Sta	(Und)	State

Ram wants to go there.

BA		nx-lx-	mi:	li-zya
	M	Loc	Umk	P
	R	Sit	Und	State

There is a man in there.

A		nga:	nga-zyuhn.-zya
	M	Umk	P
	R	Und	State

I am cold.

BT	T	ST	I
Umk	Umk	---	---

Figure 5. Normal undergoer markers for non-specific undergoers. The attributive set, stative set, and receptive set remain the same as in Figure 4. (See Appendix B for discussion of specific/non-specific undergoers.)

Examples.

BT		no-e	tubu mi:	kun.-lx	mohn.-ke-o
	M	Agt	Umk	Loc	P
	R	Act	Und	Sit	Evt

He hid a certain man in a cave.

T		no-e	za:	dxy-ke-o
	M	Agt	Umk	P
	R	Act	Und	Evt

She bore a child.

1c. Site markers

Sites are marked either as 1) goal, 2) associative, or 3) locative. Goal- and associative-marked sites are almost always animate, whereas locative sites can be animate or inanimate. Thus, given a verb which requires a locative site, the site is free to shift from inanimate to animate but the locative marking remains unchanged. Consider the following examples:

noe	ramlay	na:khar-da	pxrin.keo
he	ram	village-to	sent

He sent Ram to the village.

noe	ramlay	ngaleo-da	pxrin.keo
he	ram	me-to	sent

He sent Ram to me (to where I was).

Goal sites.

BT	T	ST	I
Gol	---	( )	---

Figure 6. Normal site markers for goal sites. (Note that no occurrences have been found in the attributive, stative, and receptive sets.)

Examples.

BT		noe	nga-lay	ngakan.	nxyn.nakeo
	M	Agt	Gol	Umk	P
	R	Act	Sit	Und	Evt

He took my food from me.

Associative sites.

BT Asc	T ---	ST Asc	I ---
BA Asc	A ---	SA	C

Figure 7. Normal site markers for associative sites. (No occurrences have been found in the stative and receptive sets.)

Examples.

BT		noe	obabu-sx	ya:h	dokeo
	M	Agt	Asc	Umk	P
	R	Act	Sit	Und	Evt

He mouthed off to his father.

BT		noe	nga-sx	txrupiya	nihkeo
	M	Agt	Asc	Umk	P
	R	Act	Sit	Und	Evt

He begged one rupee from me.

ST		no:	oama-sx	pxyn.ke
	M	Umk	Asc	P
	R	Act	Sit	Evt

He tattled to his mother.

ST		ram	nga-sx	like
	M	Umk	Asc	P
	R	Act	Sit	Evt

Ram stayed with me.

BA		palo	gyanmo-sx	khxyzya
	M	Umk	Asc	P
	R	Und	Sit	State

White matches with red.

Locative sites.

BT Loc	T ---	ST Loc	I ---
BR Loc	R ---	SR	E
BS	S ---	SS	D ---
BA Loc	A ---	SA	C

Figure 8. Normal site markers for locative and source sites.

Examples.

BT		noe	ramlay	ngaleo-kin	bxykeo
	M	Agt	Gol	Loc	P
	R	Act	Und	Sit	Evt

He took Ram from me (from where I was).

ST		ram	ngaleo-kx	huke
	M	Umk	Loc	P
	R	Act	Sit	Evt

Ram came to me (to where I was).

BR		ongxyh	yahm-tx	tohlke
	M	Umk	Loc	P
	R	Und	Sit	Evt

His head got bumped on the door.

BA		nx-lx	mi:	lizya
	M	Loc	Umk	P
	R	Sit	Und	State

There is a man in there.

Locative markers. Locative markers in Kham are quite numerous and belong in general to a system of locative stems and locative affixes. Locative affixes are suffixed directly to noun phrases and to locative stems. Locative stems are not suffixed to noun phrases. That is, the construction can be NP-(loc)afx, or (loc)stem-(loc)afx, but not NP-(loc)stem-(loc)afx. One class of locative stems, however, follows a possessive noun phrase in expressions such as "the table's underneath," "the house's front," etc. This construction may be expressed as NP-(poss)afx + (loc)stem-(loc)afx.

Following is a list of some of the more common locative stems and affixes in Kham: (For more details see Watters (1973), Appendix B)

stems:

a-	immediate
nx-	near
ho-	remote
ro-	up
me-	down
ya-	up yonder
gyahn.-	on the level
or-	right side
ngah-	ahead
chin.-	behind
txn.-	to one side

possessed stems:

duhn.-	under
txr-	on top of
khar-	between, among
sora:-	directly above
lap-	beside
jin.-	inside of

affixes:

-kx	at
-ngx	around (general area)
-tx	on
-lx	in
-da	to
-ni	from (or on the side of)
-kin	away from (to there)
-tin	off from

Figure 9 illustrates the possible combinations of some of the stems and affixes listed above:

	-kx	-ngx	-tx	-lx	-da	-kin	-tin
NP	NPkx	NPngx	NPtx	NPlx	NPda	NPkin	NPtin
a-	akx	angx	atx	alx	ada	akin	atin
nx-	nxkx	nxngx	nxtx	nxlx	nxda	nxkin	nxtin
ho-	hokx	hongx	hotx	holx	hoda	hokin	hotin
ro-	rokx	rongx	rotx			rokin	rotin
ngah-	ngahkx	ngahngx	ngahtx		ngahda	ngahkin	
khar-	kharkx			kharlx	kharda	kharkin	

Figure 9. Illustration of locative stem and affix combination in Kham.

The following examples illustrate the meaning of combinations illustrated in Figure 9 using Row 2 a- as a representative sample:

a-kx	here (at this place)
a-ngx	around here (in this general area)
a-tx	on this
a-lx	in here, in this
a-da	to here (as in 'Come here')
a-kin	away from here
a-tin	off of this (as in "He fell off of this')

There are a number of instances in which more than one locative affix can occur on a single locative stem. It is sufficient here to give but a few examples:

ho-txn.-ni	around on the other side
nx-ya-lx	nearby but slightly upriver
me-phx-tx	on the lower side
ho-ni-kx	on the far side (of several)
txn.-phx-ni	from one side

2. The Verbal Role Marker System in Kham

Kham is a pronominalized language in the sense that actors, undergoers, and sites are marked in the verb by means of affixes, some of which bear phonological resemblance to the free pronouns occurring respectively as actors, undergoers, and sites. In any given clause pattern, a maximum of two roles may be marked in the verb. In the BiTransitive pattern, the actor and the goal-marked role (either undergoer or site) will be marked in the verb.

BT Act Gol	T Act Und	ST Act	I Act
BR Und	R Und	SR	E

Figure 10. Roles marked in the Kham verb. (The verbal role markers for each event clause type apply as well to the corresponding inherent state clause type. Thus to avoid redundancy we have illustrated only the event side of the matrix in this section.)

In the discussion of verbal role markers, it is necessary to make a distinction between active and passive verb forms.[2] A given verb form controls a partially unique set of role markers and a partially unique set of morphological positions at which those markers are realized. For verbs in the active form there are four positions at which person-number-role affixes may occur (of which a maximum of two may be realized for a given clause). Such is illustrated in Figure 11 (where p-n refers to a person-number slot).

p-n 1 --- p-n 2 --- stem --- p-n 3 --- tense --- p-n 4

Figure 11. Person-number slots in active verb forms.

Taking into consideration the fact that no more than two person-number slots can be filled in a given clause, Figure 12 illustrates all possible combinations of person-number affixes in a given clause of active form.

	p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
1.	1st or 2nd Act	3rd Gol-Sit/ 3rd Und	T/BT	------	tense	------
2.	1st or 2nd Act	------	T/BT	1st, 2nd Gol-Sit/ 1st,2nd Und	tense	------
3.	------	3rd Gol-Sit/ 3rd Und	T/BT	------	tense	3rd Act
4.	------	------	T/BT	1st,2nd Gol-Sit/ 1st,2nd Und	tense	3rd Act
5.	1st or 2nd Act	------	I/ST	------	tense	------
6.	------	------	I/ST	------	tense	3rd Act
7.	1st or 2nd Und	------	R/BR	------	tense	------
8.	------	------	R/BR	------	tense	3rd Und

Figure 12. Fillers of person-number slots in T/BT, I/ST, and R/BR verbs in active form.

In the passive form there are but three positions at which person-number-role affixes may occur (of which a maximum of two may be realized). The positions are illustrated in Figure 13:

p-n 1 --- p-n 2 --- stem --- p-n 3 --- tense --- passive -o

Figure 13. Person-number slots in passive verb forms.

The full range of combinations for a verb in the passive form is as follows:

	p-n 1	p-n 2	stem	p-n 3	tense	pass mk
1.	Any Act	3rd Gol-Sit/ 3rd Und	T/BT	------	tense	-o
2.	Any Act	------	T/BT	1st,2nd Gol-Sit/ 1st,2nd Und		
3.	Any Act	------	I/ST	------	tense	-o
4.	Any Und	------	R/BR	------	tense	-o

Figure 14. Fillers of person-number slots in T/BT, I/ST, and R/BR verbs in passive form.

There is a great deal of homophony within the verbal role system. The affix ni, for example, has four different interpretations correlating with the four different p-n positions in which it may occur, as shown in the following:

1. In p-n 1 ni = 3rd dual actor, passive only
2. In p-n 2 ni = 3rd dual Und, active and passive
3. In p-n 3 ni = 2nd singular Und, active and passive
4. In p-n 4 ni = 3rd dual actor, active only

2a. Actor markers (for inherent clauses only)

	sg.	dual	pl.
1st	nga	gin	ge
2nd	nx	a jin je[1]	je
3rd	b o $\emptyset$[2]	c ni rx[3] ya[4]	d rx[5] ya[6]

Figure 15. Actor markers in the Kham verb. (The boxes labelled a, b, c, and d are illustrated in the examples below.)

[1] with plural 1st person Und

[2] I and ST verbs, active only

[3] with 1st/2nd, dual/pl Und, active only

[4] with 1st/2nd, dual/pl Und, passive only

[5] active

[6] passive

Figures 15 and 16 are to be read in conjunction with Figures 12 and 14.[3] That is, Figures 15 and 16 illustrate person-number-role markers, and Figures 12 and 14 designate the morphological (p-n) positions at which these role markers are realized.

Examples illustrating the boxes of Figure 15 which have multiple entries--a, b, c, and d: (For illustrations of the other boxes of Figure 15, see Sections III.C.2. and III.C.4.)

a.	jin		jin	su:-ra-lay	jin-ra-dxyna-o	
		M	dual	pl	2dA-3pU-stem-p	(passive)
		R	Act	Und	P	

Whom all did you two go to see?

a.	je		jin	ge:-lay	je-zyu-si-o	zx
		M	dual	pl	2dA-stem-1pU-p	PV (passive)
		R	Act	Und	P	

You two did too cheat us!

b.	o		no-e	nga-lay	cyu:-na-ke-o	
		M	sg.	sg.	stem-1sU-pst-3sA	(active)
		R	Act	Und	P	

He watched me.

b.	o		nga-lay	su:-e	o-cyu:-na-o	
		M	sg.	sg.	3sA-stem-1sU-p	(passive)
		R	Und	Act	P	

I was watched by whom?

b.	ø		ram	so-ke	ø
		M	sg.	stem-pst	3sA (active)
		R	Act	P	

Ram got up.

c.	ni		nga-za:-ni	zihm-lx	li-ki-ni	
		M	dual	Loc	stem-pst-3dA	(active)
		R	Act	Sit	P	

My two children stayed in the house.

c.	ni		nga-za:-ni	zihm-lx	ni-le-o	ro
		M	dual	Loc	3dA-stem-p	PV (passive)
		R	Act	Sit	P	

Did my two children stay in the house?

c.	rx		noni-e	gin-lay	poh-sin-ke-rx	
		M	dual	dual	stem-1dU-pst-3dA	(active)
		R	Act	Und	P	

Those two hit us two.

c.	ya		noni-e	gin-lay	ya-poh-sin-o	zx	
		M	dual	dual	3dA-stem-1dU-p	PV	(passive)
		R	Act	Und	P		

Those two did hit us two!

d.	rx		men.ma-rx	sin.-da	ba-ke-rx	
		M	pl.	Loc	stem-pst-3pA	(active)
		R	Act	Sit	P	

The women went to (get) wood.

d.	ya		men.ma-rx	sin.-da	ya-ba-o	leo	
		M	pl.	Loc	3pA-stem-p	PV	(passive)
		R	Act	Sit	P		

The women went to (get) wood! (surprise)

2b. Goal site and undergoer markers (for inherent clauses only)

In BT verbs which have a goal site, it is the site which is marked in the verb and not the undergoer. In all other cases where an undergoer is present, the undergoer is marked in the verb.

		sg.	dual	pl.
R & BR	1st	nga	gin	ge
	2nd	nx	jin	je
	3rd	a Ø o[1]	ni	b rx ya[1]
T & BT	1st	na	c sin si[2]	si
	2nd	ni	d cin ci[2]	ci
	3rd	Ø	e ni ra[3] yara[4]	f ya ra[5] yara[4]

Figure 16. Goal site and undergoer markers in the Kham verb. (The boxes labelled a through f are illustrated in the examples below.)

[1] passive
[2] with 1st/2nd dual/plural actor
[3] with dual/plural actor but only if ra is not the first morpheme in the verb
[4] with dual/plural actor but only if yara is the first morpheme in the verb
[5] with any actor but only if ra is not the first morpheme in the verb

Examples illustrating the boxes of Figure 16 which have multiple entries--a, b, c, d, e, and f: (For illustrations of the other boxes of Figure 16 see Sections III.C.2. and III.C.4.)

a	Ø		ri:h	ja:-lx	byal-ke Ø		
		M	sg	Loc	stem-pst 3sU		(active)
		R	Und	Sit	P		

Water filled up the jug.

a	o		ri:h	ja:-lx	o-byal-o	ro	
		M	sg	Loc	3sU-stem-p	PV	(passive)
		R	Und	Sit	P		

Did water fill up the jug?

b	rx		jwi:h-rx		kyah-ke-rx		
		M	pl		stem-pst-3pU		(active)
		R	Und		P		

The sticks broke.

b	ya		jwi:h-rx		ya-kyah-o	leo	
		M	pl		3pU-stem-p	PV	(passive)
		R	Und		P		

The sticks broke! (exclamation)

c	sin		no-e	gin-lay	cyu:-sin-ke-o		
		M	sg	dual	stem-1dU-pst-3sA		(active)
		R	Act	Und	P		

He watched us two.

c	si		je:	gin-lay	je-rxn.-si-o	ro	
		M	pl	dual	2pA-stem-1dU-p	PV	(passive)
		R	Act	Und	P		

Did you(pl) see us two?

d	cin		no-e	jin-lay	cyu:-cin-ke-o		
		M	sg	dual	stem-2dU-pst-3sA		(active)
		R	Act	Und	P		

He watched you two.

d	ci	ge:	jin-lay	ge-rxn.-ci-ke	
	M	pl	dual	1pA-stem-2dU-pst	(active)
	R	Act	Und	P	

We saw you two.

e	ni	nga:	ka:h-ni	nga-ni-sapna-ke	
	M	sg	dual	1sA-3dU-stem-pst	(active)
	R	Act	Und	P	

I searched for the two dogs.

e	ra	gin	ka:h-ni	gin-ra-sapna-ke	
	M	dual	dual	1dA-3dU-stem-pst	(active)
	R	Act	Und	P	

We (2) searched for the two dogs.

e	yara	no-ra-e	ya-nxyn.-ni-lay	yara-khul-ke-rx	
	M	pl	dual	3dU-stem-pst-3pA	(active)
	R	Act	Und	P	

They called for their two friends.

f	ya	no-e	o-har-rx	ya-dxy-ke-o	
	M	sg	pl	3pU-stem-pst-3sA	(active)
	R	Act	Und	P	

He found his cows.

f	ra	no-e	o-har-rx	o-ra-dxy-o	leo	
	M	sg	pl	3sA-3pU-stem-p	PV	(passive)
	R	Act	Und	P		

He found his cows! (exclamation)

f	yara	no-ra-e	ya-har-rx	yara-dxy-ke-rx	
	M	pl	pl	3pU-stem-pst-3pA	(active)
	R	Act	Und	P	

They found their cows.

3. The Focus Marker System in Kham

In the preceding section we discussed the role structure of a clause. The role structure of a clause is marked by nominal and verbal affixes and provides that portion of the sememic interpretation of the clause having to do with the relations actor, undergoer, and site. Given only the role structure of the clause, however, one is not always able to identify such relationships of focus as subject, object, or referent, given and new, theme and rheme, etc. One may view the focus structure of the clause as a separate system superimposed upon the role structure and marked in terms of nominal and verbal affixes, word order, and deletion.

The focus marker system in Kham consists of the following semi-autonomous sub-systems: 1) grammatical focus, 2) information focus, 3) thematic focus, and 4) emphatic focus. Each of these four is independent of the others in that it contrasts different parts of the total system. At the same time all are mutually interdependent.

3a. Grammatical focus

Grammatical focus has to do with the grammatical relations subject (Sub), object (O), indirect object (IO), referent (Ref), adjunct (A), and predicate (P). In order to make a proper start in defining these grammatical relations for Kham, it is necessary to make a basic assumption about Kham (which could possibly apply to language in general). The assumption is that in a clause where all and only the nuclear items are present and where no special focus devices have applied, the theme of that clause coincides with its subject. In other words, the thing which is being talked about in such a clause will be the subject. This goes to say, of course, that in clauses where special focus devices have applied, the theme of the clause does not always coincide with its subject.

The theme of a clause is marked by its position in the clause. It is the item which occurs in clause initial position. The subject of a clause, on the other hand, is marked in the verb by pronominal affixes. These affixes agree both in person and number to the free form of the subject. Where the free form of the subject is deleted from the clause under certain focus considerations, the pronominal affixes on the verb remain unchanged. (These pronominal affixes are the same set of affixes which functioned in the preceding section as actor markers in the transitive set and as undergoer markers in the receptive set. This same set of affixes can also be interpreted in this section as subject markers in the active and as adjunct markers in the passive.)[4]

Assuming again that the subject of a normal clause coincides with its theme, it becomes evident that various roles can occur as the subject of a given clause. In searching for the natural word order of various clauses it was soon discovered that by shifting a certain verbal affix from -ke to -o[5] the unanimous informant reaction was to shift the word order of the clause in question. Consider the following examples:

BT	noe	ka:h	zihmlx	ja:h-ke-o[6]
M	Agt	Umk	Loc	Active
R	Act	Und	Sit	Evt

He put the dog in the house.

BT	ka:h	zihmlx	noe	o-ja:h-o
M	Umk	Loc	Agt	Passive
R	Und	Sit	Act	Evt

The dog was put in the house by him.

T	rame	ao be:h	jxy-ke-o
M	Agt	Umk	Active
R	Act	Und	Evt

Ram made this basket.

T	ao be:h	rame	o-jxy-o
M	Umk	Agt	Passive
R	Und	Act	Evt

This basket was made by Ram.

ST	nga:	ao zihmlx	nga-li-ke
M	Umk	Loc	Active
R	Act	Sit	Evt

I stayed in this house.

ST	ao zihmlx	nga:	nga-le-o
M	Loc	Umk	Passive
R	Sit	Act	Evt

This house was lived in by me.

Thus the role chosen as subject of a clause is indicated by a verbal affix, or a voice marker. In other words, voice indicates the organizational relationship between boxes 1 and 4. Where the actor is in thematic position, the voice is labelled as active. Where either the undergoer or goal site is in thematic position in a clause which has an actor, the voice is labelled as passive. Note that where the goal site is in thematic position, the site is also marked in the verb (see Figure 10). Thus, it is always possible to say that the subject is marked by an agreement pattern with the verb as illustrated in Figures 17 and 18.

BT/BS Act	T/S Act	ST/SS Act	I/D Act
BR/BA Und	R/A Und	SR/SA dummy	E/C dummy

Figure 17. The role of subject in active voice. (The two cells enclosed by solid lines are derived clause types in Kham--see sections IV.A.1 and 2 for the origin of these clauses. The dummy is an agreement pattern with an undergoer which cannot be made explicit.)

Examples. (Agr = agreement pattern; G = grammatical category.)

```
BT        norae ngalay bxhtanji ya-n.-ke-rx
   Agr    Act-----------------------------3pA
   G      Sub    IO      O          P

          They gave a potato to me.

BT        gin  kwa be:hlx gin-chwi:-ke
   Agr    Act------------->ldA
   G      Sub  O    Ref     P

          We (2) stuffed clothes in a basket.

T         rame be:h jxy-ke-o
   Agr    Act---------------3sA
   G      Sub  O    P

          Ram made a basket.

ST        ram  zihmda  ba-ke Ø
   Agr    Act-----------------3sA
   G      Sub  Ref       P

          Ram went to the house.

I         nga:  nga-so-ke
   Agr    Act---lsA
   G      Sub    P

          I got up.

BR        ri:h ja:lx byal-ke Ø
   Agr    Und-----------------3sU
   G      Sub  Ref    P

          Water filled up the jug.

R         bxhres  mos-ke Ø
   Agr    Und------------3sU
   G      Sub       P

          The bread got moldy.

SR        Ø       akx  jyaohn.-ke Ø
   Agr    dummy------------------3sU
   G      (Sub)   Ref   P

          (It) became noisy here.

E         Ø       zyuhn.-ke  Ø
   Agr    dummy-------------3sU
   G      (Sub)   P

          (It) turned cold.
```

BT/BS Und Sit*	T/S Und	ST/SS no Sub	I/D ---
BR/BA Und	R/A Und	SR/SA no Sub	E/C ---

Figure 18. The role of subject in passive voice.
*with goal-marked site
(The three cells enclosed by solid lines represent clauses which have undergone a previous derivation before the passive derivation was applied. The passive voice does not apply to clauses which belong inherently to these cells. See IV.B.3b for the origin of these clauses.)

In the ST clause there is but one pronominal affix on the verb--the one which agrees with the adjunct-actor. In the derived SR (SA) clause there are no pronominal affixes on the verb. Thus according to our definition of subject, we must say that these clause types have no subject.

Examples.

BT ngalay bxhtanji rame oya-n.-o
Agr Sit------------------------1sS
G Sub O A Evt

To me the potato was given by Ram.

BT kwarx be:hlx ge: ge-ra-chwi:o
Agr Und-------------------3pU
G Sub Ref A Evt

The clothes were stuffed in the basket by us.

T ao be:hrx rame o-ra-jxy.o
Agr Und-----------------3pU
G Sub A p

These baskets were made by Ram.

ST Ø ao zihmlx ge: gelec
Agr none possible
G no Sub Ref A P

In this house was lived by us. (This house was lived in by us.)

BA kwarx alx chwi:sio liżya-rx
Agr Und--------------------------3pU
G Sub Ref P

The clothes have been stuffed in here.

SA	Ø	ao zihmlx	lisio lizya
Agr	none possible		
G	no Sub	Ref	P

In this house has been lived. (This house has been lived in.)

Once the role of the subject has been determined, all other grammatical categories are determinable. There is a natural ordering of roles: Act, Gol Sit, Und, Loc Sit.[7] In the active voice these roles are matched by the grammatical categories Sub, IO, O, and Ref respectively. In the passive voice, where roles other than the actor are chosen as subject, the actor is assigned to the Box 1 category, adjunct (A). (Adjuncts in our use of the term are nuclear to the clause, not peripheral.)

		Act	Gol Sit	Und	Loc Sit
Active	BT	Sub	IO	O	
	BT	Sub		O	Ref
	T	Sub		O	
	ST	Sub			Ref
	I	Sub			
	BR			Sub	Ref
	R			Sub	
Passive	BT	A	Sub	O	
	BT	A		Sub	Ref
	T	A		Sub	
	ST	A			

Figure 19. The grammatical classification of roles in Kham.

3b. Information focus

Information focus as defined by Halliday is a system which "assigns to the information unit a structure in terms of the two functions 'given' and 'new.'" He further states that what is focal is new and what lies outside that domain can be said to have the function given. Where the whole information unit (for our purposes restricted to the clause) is new information, it is said to be in unmarked focus (Halliday 1967:204).

In Kham we distinguish between clauses with unmarked focus and clauses with marked focus. In unmarked focus the whole clause expresses new information. In this case the clause will normally have all its nuclear roles and may also have peripheral roles as well. Such a clause is normally active, and the order of constituents is unmarked. Where the clause has marked focus, both given and new are expressed, and all of the given is normally deleted except that which is chosen as theme. When the thematic element is chosen from the new, all of the given is normally deleted.

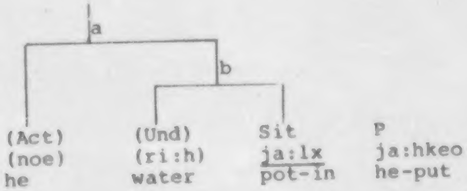
By making use of a controlled set of questions in which the question itself forces a focus upon a single role as the new information, it is found that the pre-verbal constituent in Kham is the one marked as new information. By using the same technique, it is also found that all given information except that which is chosen as the theme is normally deleted. For this reason, it is not normal for more than two roles (those representing theme and new) to be realized on a given clause which is in marked focus.

Note carefully, then, that since Figures 20 through 22 illustrate BT clauses which are in marked focus, at least one of the given constituents (marked in the figures by parentheses) are normally deleted from the clause. Only the clause illustrated in Figure 20 has all the characteristics normal for unmarked focus. Where one or more of its parenthesized constituents are deleted, however, the clause can no longer be viewed as having unmarked focus but is clearly marked as representing the functions given and new.

In Kham there are two permutations which function to bring a given role into pre-verbal position (and thus into focus as new information), both of which are realized in a BT clause. They are:

1) Passive permutation
2) Undergoer site permutation

The structure of a BiTransitive clause may be represented for our purposes as a kind of mobile with two rotating axes, where axis a represents the passive permutation and axis b represents the undergoer site permutation.



He put water in the pot.

Figure 20. The structure of a BT clause in terms of permutation axes.

The BT clause illustrated in Figure 20 marks the site as new information (but only where one of the given items is deleted. Otherwise, the clause represents unmarked focus in which the whole clause is new information.) The undergoer may be marked as new information by applying the undergoer site permutation to the structure given in Figure 20, thus rotating the mobile at axis b. Such is illustrated in Figure 21.

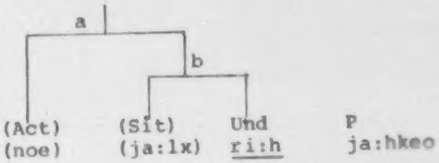


Figure 21. The undergoer as new information in a BT clause.

The actor may be marked as new information by applying the passive permutation either to Figure 20 or to Figure 21. The passive permutation involves rotating the mobile on axis a and changing the verb to the passive form.

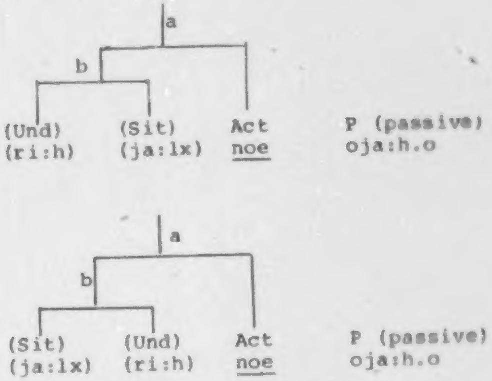


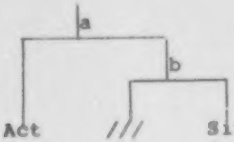
Figure 22. The passive permutations of Figures 20 and 21 with the actor as new information.

3c. Thematic focus

The theme of a clause is that which is now being talked about. In unmarked focus the theme of a clause always corresponds with its subject. Where the focus is marked, however, any item in the clause may be focused upon as the theme. It is the clause initial constituent in Kham which is marked as the theme of the clause.

A given role may be brought into clause initial position and thus into thematic focus by deleting all given information which has not been chosen as theme. Thus applying simple deletions to the BT clause illustrated in Figure 20, we have the following possibilities for thematic focus:

1. Actor-subject as theme

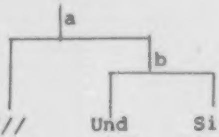


Act	///	Sit	P
rame		ja:lx	ja:hkeo
Ram		pot-in	he-put
theme		new	

Ram put it in the pot

The above clause implies a context like: "I know where John put the water, but where did Ram put it?"[8] The answer is, "Ram put it in the pot."

2. Undergoer-object as theme

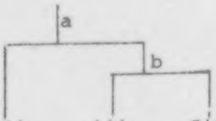


///	Und	Sit	P
	ri:h	ja:lx	ja:hkeo
	water	pot-in	he-put
	theme	new	

The water he put in the pot

The above clause implies a context like: "I know where he put the milk, but where did he put the water?" The answer is, "The water he put in the pot."

3. Site-referent as theme



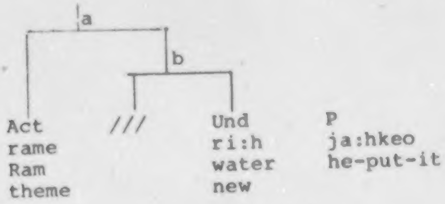
///	///	Sit	P
		ja:lx	ja:hkeo
		pot-in	he-put
		theme/new	

In the pot he put it.

The above clause implies a context like: "Where did Ram put the water?" The answer is, "He put it in the pot."

Applying simple deletions to the BT clause illustrated in Figure 21 in which the undergoer is new information, we have the following possibilities for thematic focus:

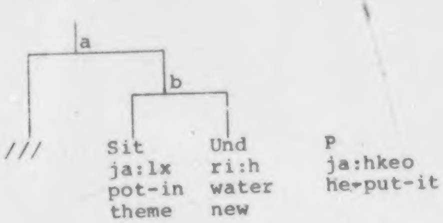
1. Actor-subject as theme


a
b
Act
rame
Ram
theme
///
Und
ri:h
water
new
P
ja:hkeo
he-put-it

Ram put water (in the pot)

The above clause implies a context like: "John put beer in the pot, but what did Ram put in the pot?" The answer is, "Ram put water in."

2. Site-referent as theme

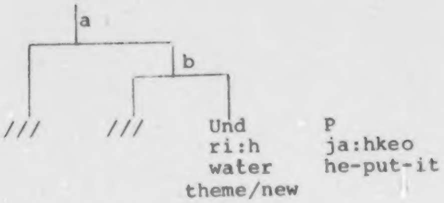

a
b
///
Sit
ja:lx
pot-in
theme
Und
ri:h
water
new
P
ja:hkeo
he-put-it

In the pot he put water

The above clause implies a context like: "I know what he put in the bowl, but what did he put in the pot?" The answer is, "In the pot he put water."

3. Undergoer-object as theme

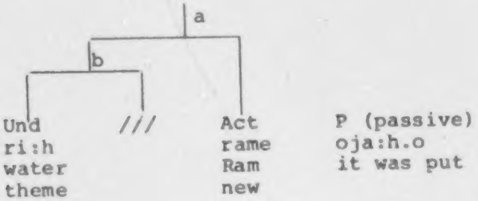
The clause below implies a context like: "What did he put in the pot?" The answer is, "He put water in."


a
b
///
///
Und
ri:h
water
theme/new
P
ja:hkeo
he-put-it

He put water in

Applying simple deletion to either of the BT clauses illustrated in Figure 23, in which the actor is new information, we have the following possibilities for thematic focus:

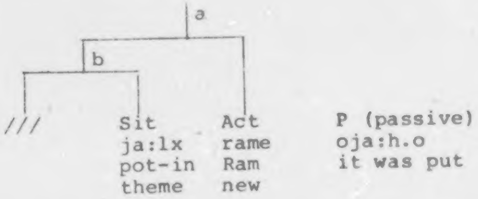
1. Undergoer-subject as theme


a
b
Und
ri:h
water
theme
///
Act
rame
Ram
new
P (passive)
oja:h.o
it was put

The water was put in by Ram

The above clause implies a context like: "I know who put the beer in, but who put the water in?" The answer is, "The water was put in by Ram."

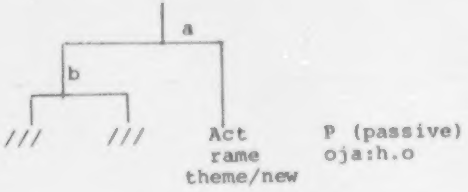
2. Site-referent as theme


a
b
///
Sit
ja:lx
pot-in
theme
Act
rame
Ram
new
P (passive)
oja:h.o
it was put

The pot was poured into by Ram

The above clause implies a context like: "I know who put water into the bowl, but who put it into the pot?" The answer is, "It was put into the pot by Ram."

3. Actor-adjunct as theme

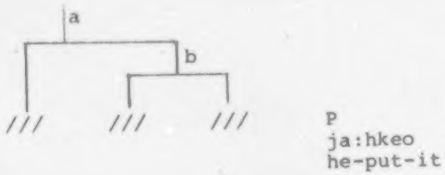


It was put in by Ram

The above clause implies a context like: "Who put the water in the pot?" The answer is, "Ram did."

By deletion of all else, the predicate itself may be focused upon both as the theme and as new information. This is illustrated in the following:

1. Active verb as theme

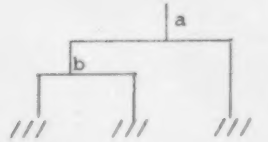


He put it

The above clause implies a context like: "Did he put water in the pot or not?" The answer is, "He did."

2. Passive verb as theme

The clause below implies a context like: "I don't believe that Ram put it in." The answer is argumentative: "He did too put it in." (The factual emphasis particle zx is normally used in this context--see 3d. section following.)



P (passive)
oja:h.o (zx)
it was put (FE)

It was too put in by him

3d. Emphatic Focus

Emphatic focus is marked by emphatic particles. At the time of this writing it is not altogether clear how these particles operate in certain contexts. The following, however, gives a general picture of some of their most common usages:

Contrastive emphasis te. Contrastive emphasis is so called because it contrasts a single item with a whole class of possible items. Contrastive emphasis occurs most frequently on an item which is under thematic focus. For example:

(The underlined portion in the English glosses represents a stressed intonation pattern.)

nga: te nga-m-ba
I CE I-neg-go
I'm not going (the rest of you can if you want).

rame te be:h jxy-ke-o
ram CE basket he-made-it
Ram made a basket (all the other boys made something else).

ao te bxnxy cao lizya
this CE very good is
This one is really nice (the rest are not so nice).

ao te rame o-jxy-o
this CE ram it-was made
This one was made by Ram (the other was made by his brother).

nxn.lay te nga-ma-i-n.
to-you CE I-will not-give
I will not give it to you (to someone else--O.K., but not to you).

achim te bxnxy mwin.zya
today CE very warm-is
Today it's really hot (yesterday wasn't quite so bad).

The contrastive force of te following hokin is considerably weaker:

hokin te ram huke
after-that CE ram came
It was after that, that Ram came.

Factual emphasis zx. (See Absolutive, III.F.2b.) Factual emphasis is so called because it asserts the statement as absolute truth and in accordance with the facts. For example:

nga:-zx
I FE
It is I.

bxhn. sin.-zx
fir tree-FE
A fir is a tree.

nxkx-zx obao
there-FE he went
He went to that very place (I saw him).

ojxy.o-zx
he-made-it FE
He did make it (believe it or not).

nga:-zx ngamaba
I FE I-neg-go
It is I who is not going.

khepa te khepa-zx ao
man CE man FE this
Speaking of men, this fellow is a man.

Reinforcive emphasis be. Reinforcive emphasis reinforces the strength of a statement and suggests disagreement with the listener. For example:

ma:hkx be
no RE
Definitely not!

can.do be
hurry RE
Hurry it up (and I mean it).

ao-zx be
this-FE RE
This is the one (not the one you mentioned).

banke be
go-ipr RE
Get going (I won't say it again).

Contra-expectancy emphasis ci. The contra-expectancy morpheme *ci* shows a particular item in the clause to be counter to expectancy either to the listener or to the speaker. For example:

nga: te lun. ci ngaleo
I CE stone CeE I-thought
I thought it was a stone (but it's not).

obaduo ci leo
already-went CeE Excl
He already went! (I didn't expect that.)

B. *Systemic Contrast*

The purpose of this section is to show how it was determined which of the cells in Figure 2 correspond to inherently contrastive clause patterns in Kham. Contrasts which argue for separate inherent clause patterns will be examined under the three headings: a) general contrasts, which coincide with the features separating rows and columns in Figure 2; b) specific contrasts, which contrast individual cells with one another, or certain groups of cells with others; and c) derivation contrasts.

1. General Contrasts

There are four general contrasts in the transitivity system. They will be discussed in the following order: *state* vs. *event*, *actor* or *statant* (vs. no actor or statant), *undergoer* (vs. no undergoer), and *site* (vs. no site). In discussing these contrasts it will be useful to refer to the tree diagram of the transitivity system in Figure 23. (Underlined terminal nodes are clause types inherent in Kham.)

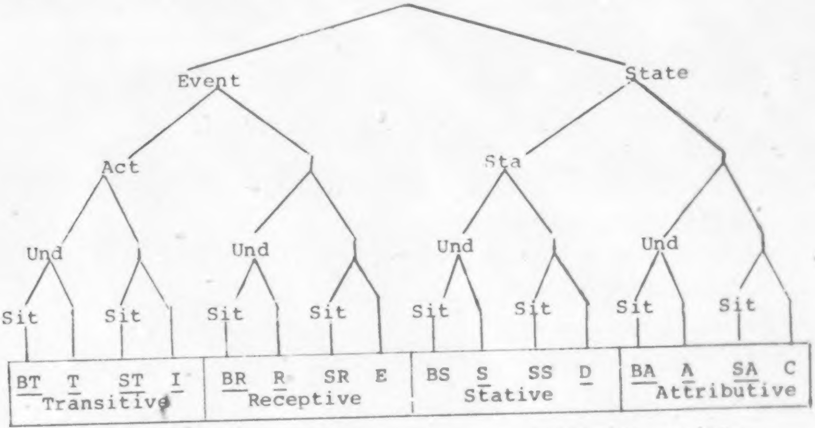


Figure 23. Tree diagram of the transitivity system.

1a. State vs. event

State	Event
1) Tense marker -zya indicates a static state.	1) Tense marker -zya indicates a present continuous tense.

Examples.

A	nxhm khyo:-zya	The tumpline is long.
R	gohr khyu:-zya	The plow is wearing out.
S	rame zihm jxy.o sxyn.-zya-o	Ram knows how to build a house.
T	rame zihm jxy-zya-o	Ram is building a house.

State	Event
2) Use of the past tense marker -ke results in a derivation to the event side.	2) Use of the past tense marker -ke does not result in a derivation. -ke is the most commonly occurring tense with R & T sets.

Examples.

A	nxhm	khyo:-zya	The tumpline is long.
	Und	State	
becomes			
R	nxhm	khyo:-ke	The tumpline became long.
	Und	Event	
R pres	gohr	khyu:-zya	The plow is wearing out.
	Und	Event	
becomes			
R Pst	gohr	khyu:-ke	The plow wore out.
	Und	Event	

State	Event
3) Does not occur with the modal affix du (can).	3) Occurs optionally with the modal affix du (can).
4) Does not occur with instrumental adverbs.	4) Occurs optionally with instrumental adverbs.
5) Does not occur with manner adverbs.	5) Occurs optionally with manner adverbs.
6) Does not undergo stativization.	6) Optionally undergoes stativization.
7) Optionally undergoes eventivization.	7) Does not undergo eventivization

8) A difference in derivation potential. In Figure 42 (Section IV.C.1) compare trees dominated by [A] and [S] with the trees dominated by [R] and [T].

State vs. event in plus-actor sets (S-set vs. T-set). All contrasts listed above apply here as well. The following are further contrasts between state and event peculiar to the stative and transitive sets.

S-set	T-set
1) The affix na indicates an internal process.	1) The affix na indicates the literal meaning 'to go.'

Examples.

S rame zihm jxy.o pxyn.-na-zyao
Ram is growing in his desire to build a house.

T rame zihm jxy-na-zyao
Ram is going off to build a house.

S-set	T-set
2) Undergoer occurs only as an embedded clause.	2) Undergoer may occur as an embedded clause or as a NP.
3) Rejects normal imperatives.	3) Takes a normal imperative.
4) D cannot be transitivized.	4) I and ST may be transitivized with sx-.
5) Does not occur in the passive voice.	5) Occurs optionally in the passive voice.
6) Does not occur in the causative.	6) Occurs optionally in the causative.
7) Does not occur with benefactives.	7) Occurs optionally with benefactives.
8) Does not occur with embedding modals (permissive, desire, obligation, etc.).	8) Occurs optionally with embedding modals.

State vs. event in minus-actor sets (A-set vs. R-set). The eight contrasts listed under 1a. above apply here as well. The following are further contrasts between state and event peculiar to the attributive and receptive sets.

A-set	R-set
1) Occurs optionally with the attributive causative jxy-nya.	1) Does not occur with the attributive causative jxy-nya.
2) Does not undergo transitivization with sx-.	2) Optionally undergoes transitivization with sx-.
3) The normal question proverbial used is, "What is it like?"	3) The normal question proverbial used is, "What happened to it?"

1b. Actor, statant vs. no actor, statant

S & T sets	A & R sets
1) Verb direction is outward or active in force. The subject "verbs."	1) Verb direction is inward or passive in force. The subject "gets verbed."
Examples.	
T mi:e ka:h sxyhkeo	The man killed the dog (outward).
R ka:h sike	The dog died (inward).
2) Actor is subject.	2) Undergoer is subject.
3) The affix si refers to a deleted actor.	3) The affix si refers to a deleted undergoer.
Examples.	
T nga: zihm nga-jxy-ke zihm jxy-si-ke	I built a house. (I) built a house.
R nga: nga-gyo:h-ke gyo:h-si-ke	I became important. (I) became important.
4) The affix si can be applied twice, once for actor deletion and again for undergoer deletion.	4) The affix si can be applied only once.
Examples.	
(basic) BT alx ja:h-si-si-e	(One) pours (things) in here. or This is pour-able into
(basic) R gyo:h-si-ke	(I) became important.
5) Causative induces clear double function	5) Causative induces no double function.

6) A difference in derivation potential. Compare trees dominated by [S] and [T] with the trees dominated by [A] and [R] in Figure 42.

Actor vs. no actor (T-set vs. R-set). The six contrasts listed directly above apply here as well. The following are further contrasts between actor vs. no actor peculiar to the event side of the tree.

T-set	R-set
1) The modal du applied to a T verb yields the meaning 'can' in an active sense.	1) The modal du applied to an R verb yields the meaning 'might' in a non-active sense.

Examples.

Applied to T verb:
rame zihm jxy-du-[illegible]
Ram can build a house (he knows how).

Applied to R verb:
ram si-du-e
Ram might die (it's a possibility).

2) The modal verb pxyn.-nya applied to a T verb yields the meaning 'want.'	2) The modal verb pxyn.-nya applied to an R verb yields the meaning 'about to.'

Examples.

Applied to T verb:
rame zihm jxy.o pxyn.-zyao
Ram wants to build a house.

Applied to R verb:
ram sio pxyn.-zyao
Ram is about to die.

3) Instrument slot may be filled by a clausal or a NP.	3) Instrument slot can be filled by a clausal only.

Examples.

T rame jxhn.-e lun. kxlx:keo
Ram pried the stone with an iron bar.

R ram ojoro uhun.o-e sike
Ram died because he caught a fever.

4) Three types of adjectivals may be formed from these verbs (except I verbs).	4) Only one type of adjectival can be formed.

Examples.

T	o-jxy-o zihm	The house which he built
	jxy-o mi:	The man who made it
	jxy-si-o zihm	The made house
R	khyu:-o gohr	The worn out plow

5) The adjectival formed	5) The adjectival formed by

by -o modifies the actor (see above).	-o modifies the undergoer (see above).
6) T derives to R with the affix si.	6) R derives to T with the affix sx.

Statant vs. no statant (S-set vs. A-set). The six contrasts listed under 1b. above apply here as well. The following are further contrasts between statant vs. no statant peculiar to the state side of the tree.

S-set	A-set
1) Does not occur in the causative.	1) Occurs optionally in the causative.
2) Does not undergo adjectivization.	2) Optionally undergoes adjectivization.

1c. Undergoer vs. no undergoer

+Undergoer	-Undergoer
1) Does not undergo transitivization with sx.	1) Optionally undergoes transitivization with sx. (on event side only)
2) Optionally undergoes intransitivization with si.	2) Does not undergo intransitivization.
3) Instrument can be of two types: ni (by means of) or e (with).	3) Instrument can be ni (by means of) only.

Examples.

T	rame khurju-e kyalkeo	Ram cut (it) with a knife.
ST	ram khxn.-ni bake	Ram went by foot.

4) Agent markers occur on 3rd person actors.	4) No agent markers occur on 3rd person actors.

Examples.

T	ram-e zihm jxykeo	Ram built a house.
I	ram soke	Ram got up.

5) Undergoer is marked for person and number in the verb. (See Paradigm I, Section III.C.2.)	5) There are no undergoer markers in the verb.

6) 3rd person singular actors are marked in the verb by -o.

6) 3rd person singular actors are marked in the verb by zero.

Examples.

T	rame zihm jxy-ke-o	Ram built a house.
I	ram soke 0	Ram got up.

7) Perfect tense is marked by -dx nxy.o.

7) Perfect tense is marked by -dx le.

Examples.

T	rame zihm jxy-dx nxy.o	Ram has built a house.
I	ram so-dx le	Ram has gotten up.

8) Singular imperatives are marked by -ke.

8) Singular imperatives are marked by -nike.

Examples.

T	khurja rxy-ke	Bring a knife.
I	so-nike	Get up.

9) A difference in derivation potential. Compare trees dominated by +undergoers with the trees dominated by -undergoers in Figure 42.

1d. Site vs. no site

With locative sites it seems that the only difference between the presence or absence of a site is a semantic difference. The derivation potential for clauses with or without locative sites is the same.

The contrastive status of the goal-marked site in BiTransitive clauses can be argued for, since the site is marked in the verb. For example:

rame ngalay bxhtanji ya-n.-keo
ram to me potato gave-to-me-
Ram gave a potato to me.

rame ginlay jero: hxy da-sin-keo
ram to us hello said-to us-
Ram said "hello" to us.

2. Specific Contrasts

The contrasts listed below do not coincide with those separating whole rows or columns in the transitivity matrix (Figure 2) but rather contrast individual cells with one another, or they may contrast a certain group of cells with another group.

1) Number of roles:
    - one role: I, D, R, SA, A
    - two roles: T, ST, BR, S, BA
    - three roles: BT

2) Actor or statant marked as agent:
    BT, T, S

3) Animate undergoer marked as goal:
    BT, T

4) Goal site marked in verb:
    BT

5) Clause takes normal imperative:
    BT, T, ST, I

6) Clause can be passivized:
    BT, T, ST

7) Clause embeds to modals such as purpose, potential, permissive, obligation, desire, etc.:
    BT, T, ST, I

8) Clause may be transitivized with sx-:
    ST, I, BR, R

9) Causative formed by the verb:
    - jxy-nya BA, A, SA
    - pxrin.-nya BT, T, ST, I

10) The verbal affix sx- is to be interpreted as:
    - Activizer SR, S (derived)
    - Actor addition BR, R
    - Undergoer addition ST, I

11) The meaning of the verbal affix -na is to be interpreted as:
    - Process S, D, BR, R, BA, A, SA
    - 'to go' BT, T, ST, I

12) The meaning of the construction -o take is to be interpreted as:
    - 'become' BA, A, SA
    - 'must' BT, T, ST, I

3. Derivational Contrasts

Not all inherent clause types have the same set of derived variants, and where two inherent clause types do share a given derived variant, the rules used to generate them will differ from inherent type to inherent type. These derivational differences are represented in Figure 24. The labels on the horizontal axis of the figure refer to the inherent clause types in Kham. The labels on the vertical axis refer to the derived variants. Each cell in Figure 24 specifies the shortest possible derivation from an inherent type to a given derived variant. The abbreviations in any given cell refer to the rules which apply in the derivation. Where a cell is blank, no derivation is possible. In cells for which the inherent type is the same as the derived type, no derivation is necessary and INH (inherent) is placed in the cell. A key to the rule abbreviations may be found in Appendix A.

From Figure 24 we may see, for example, that each inherent type requires a different set of rules for the derivation of the Circumstantial derived variant: A derives to C by non-contrastive undergoer deletion (nUd); R derives to C by receptive undergoer deletion (RUd) and generic pronominalization (gP); D derives to C by active receptivizer (aR) and generic pronominalization (gP); S derives to C by active receptivizer (aR), active receptive undergoer deletion (aRUd), and generic pronominalization (gP); I derives to C by active receptivizer (aR) and generic pronominalization (gP); T derives to C by active receptivizer (aR), active receptive undergoer deletion (aRUd), and generic pronominalization (gP). BA, BR, ST, and BT have no Circumstantial derived variant.

	Inherent Types									
Derived Variants	A	BA	R	BR	D	S	I	ST	T	BT
C	nUd		RUd gP		aR gP	aR aRUd gP	aR gP		aR aRUd gP	
SA	Ur	Ev RUd gP		RUd gP				aR gP		aR RUd gP
A	INH		Stv				Tv aR dAc pStv		R Stv	
BA	Ev Tv Bf aR dAc pStv	INH	Tv Bf aR dAc pStv	Stv			Tv Bf aR dAc pStv	Tv aR dAc pStv	Bf aR dAc Stv	R Stv

(Cont'd on next page)

Inherent Types (cont'd)

	A	BA	R	BR	D	S	I	ST	T	BT
E	nUd Ev		RUd		Ev aR	Ev Itv aR	aR		Itv aR	
SR	Ur Ev	Ev RUd		RUd				aR dAc		aR aRUd
R	Ev	Ev Tv Obl	INH	Tv Obl		Ev aR	Tv aR dAc	Obl	R	Obl
BR	Ev Tv Bf aR dAc	Ev	Tv Bf aR dAc	INH			Tv Bf aR dAc	Tv aR dAc	Bf aR dAc	R
D	Ev Tv Itv Stv		Tv Itv Stv		INH	Ev Itv Stv	Stv		Itv Stv	
SS	Ev Tv Prp Stv	Ev Tv Itv Stv	Tv Prp Stv	Tv Stv			Prp Stv	Tv Itv Stv	Prp Stv	Itv Stv
S	Ev Tv Stv	Ev Tv Dm	Tv Stv	Tv Dm		INH	Tv Stv	Dm	Stv	Dm
BS	Ev Tv Cv Stv	Ev Tv Stv	Tv Cv Stv	Tv Stv			Tv Cv Stv	Tv Stv	Cv Stv	Stv
I	Ev Tv Itv		Tv Itv		Ev	Ev Itv	INH		Itv	
ST	Ev Tv Prp	Ev Tv Itv	Tv Prp	Tv Itv			Prp	INH	Prp	Itv
T	Ev Tv	Ev Tv Dm Ev	Tv	Tv Dm Ev		Ev	Tv	Dm Ev	INH	Dm Ev

(Cont'd on next page)

Inherent Types (cont'd)

Derived Variants	A	BA	R	BR	D	S	I	ST	T	BT
BT	Ev Tv Cv	Ev Tv	Tv Cv	Tv Cv			Tv Cv	Tv	Cv	INH

Figure 24. Derivation rules required to derive an inherent clause type to other cells in the transitivity matrix (shortest possible routes).

C. Contrastive Types

Beginning with the BiTransitive clause type, all contrastive patterns will be illustrated with a formula and a set of examples for each type.

1: BiTransitive Clause Type (see footnote 7)

1a. With goal site

+ Sub	NP(Agt)	+ IO	NP(Gol)	+ O	NP(Umk)	+ P	VP
Act		Sit		Und		BT	

no-e	nga-lay	bxhtanji	yan.keo
he-Agt	me-Gol	potato-Umk	he-gave-to me
Act	Sit	Und	BT

He gave a potato to me.

nga:	nxn.-lay	jero:	hxy ngadin.ke

I said hello to you.

no-e	nga-lay	nga-kan.	nxyn.nakeo

He took my food away from me.

no-e	nxn.-lay	txrupiya	zyunikeo

He swindled one rupee from you.

nga:	ao-lay	sohn.rupiya	ngapho:ke

I paid three rupees for this.

noe	ao-lay	nehrupiya	ja:hkeo

He put down (paid) two rupees for this.

1b. With locative or associative site

$$+\begin{array}{c|l} \text{Sub} & \text{NP(Agt)} \\ \hline \text{Act} & \end{array} \quad + \begin{array}{c|l} \text{O} & \text{NP(}\pm\text{Gol)} \\ \hline \text{Und} & \end{array} \quad + \begin{array}{c|l} \text{Ref} & \text{NP(Loc)} \\ \hline \text{Sit} & \text{place} \end{array} \quad + \begin{array}{c|l} \text{P} & \text{VP} \\ \hline \text{BT} & \end{array}$$

no-e	sin.ka	kan.-ni	hxykeo
he-Agt	speck Umk	food-Loc	he-took out
Act	Und	Sit	BT

He took a speck out of the food.

nga:	sun-lay	muhdus-lx	ngamohn.ke

I hid the gold in a chest.

no-e	okwa	be:h-lx	chwi:keo

He stuffed his clothes in a basket.

no-e	nga-lay	en-lx	thu:nakeo

He started me in my work.

nga:	gyo:h.o	zimza-ni	ngabekxtxyke

I sorted the big from the small.

no-e	geda	nam-tx	zalkeo

He poured the grain onto the ground.

no-e	ngagur	dohr-da	cahnakeo

He went to get my load at Dhor.

nga:	ri:h	ja:-lx	ngaja:hke

I put water in the pot

nga:	ngakhxn.	nam-tx	ngatxke

I stomped my foot on the ground.

1c. Receptivizer sub-class (See IV. B.2, receptivizer rule.)

no-e	gxm	u-duhn.-lx	cxkeo

He stuck a lump of clay on its underside.

no-e	gxp	okwa-tx	txrxpkeo

He stuck a pin in the cloth.

no-e	ugur	sin.-tx	turi:keo

He scraped his load against a tree.

2. Transitive Clause Type

2a. Regular Transitives

+	Sub	NP(Agt)	+	O	NP(±Gol)	+	P	VP
	Act			Und			T	

no-e	oza:	hurkeo
he-Agt	his child Umk	he-bathed-him
Act	Und	T
He bathed his child.		
no-e	nga-lay	pxynakeo
He taught me.		
no-e	ka:h	sxyhkeo
He killed the dog.		
no-e	ge-lay	ba:hsikeo
He separated us.		
no-e	na:khar-lay	dupkeo
He gathered the village together.		
no-e	oza:-lay	kwxykeo
He covered his child (with a blanket).		
no-e	me:h	txyhn.keo
He lit the fire.		
no-e	ha	lxhn.keo
He bought a cow.		
no-e	lun.	bo:hkeo
He uprooted a stone.		
nga:	sulpa	ngacin.ke
I smoked a pipe.		
nga:	ehn.	ngaki:ke
I plowed the field.		
nxm-e	pom	ja:hkeo
The sky cast snow (it snowed).		
ngxyhn.ti-e	nga-lay	da:nakeo
The nettle stung me.		
pom-e	chi:	sxyhkeo
The snow killed the grass.		

2b. Receptivizer sub-class (See IV.B.2, receptivizer rule.)

gahm-e	osyaola	phxrle:keo
The sun shriveled the tips of the young shoots.		
gahm-e	syalo	khurupkeo
The sun shrunk the leather.		
no-e	ngaen	bxle:keo
He ruined my work.		
nga:	okhar	ngapxhle:ke
I split the branches.		
no-e	duhr	chilkeo
He trampled the seeds.		
nga:	ngakwa	ngasyu:ke
I took my clothes off.		
nga:	ngagun.	ngapi:hke
I scraped (skinned) my elbows.		

3. SemiTransitive Clause Type

+ Sub	NP(Umk)	+ Ref	NP(Loc)	+ P	VP
Act	anim	Sit	place	ST	

nyahn	sin.-tx	guhmke
squirrel Umk	tree-Loc	he-climbed
Act	Sit	ST
The squirrel climbed in a tree.		
dahpa	thala-tin	zo:ke
The boy jumped from the roof.		
ram	bxyh-txrtx	gahpke
Ram leaped across the stream.		
syal	pup-lx	khamsike
The jackal retreated into the cave.		
luhza	obabu-sx	pxyn.ke
The child tattled to his father.		
la:	ochyo:-kx	gihrke
The leopard circled around the edge.		
pxy	syah.oy-da	bahlsike
The wolf gazed towards the moon.		

dohn.arx okyan.tx cxrikerx
The spirits entered into his body.

no: mi: kham-ni pan.ke
That man spoke in Kham.

sedxn jyahn.-lx like
The demon stayed in the forest.

4. Intransitive Clause Type

+Sub	NP(Umk)	+P	VP
Act	anim	I	

ram soke
Ram Umk he-got up
Act I
Ram got up.

baza buhrke
The bird flew.

baza zuhri:ke
The chicken laid (an egg).

bama kxra:ke
The hen cackled.

phon. bon.ke
The chick left its nest.

buhmluga: con.ke
The owl alighted.

sero ngora:ke
The old man snored.

syal byun.ke
The jackal howled.

ka:h dohn.ke
The dog fled.

u: golon.ke
The hog rolled over.

ehera pumke
The hunter ducked out of sight.

bah.oza golke
The baby crawled.

nah.or phehrke
The mountain sheep crossed out of sight.

5. BiReceptive Clause Type

+ Sub	NP(Umk)	+ Ref	NP(Loc)	+ P	VP
Und		Sit		BR	

sxhr	han.-lx	gxrke
antelope Umk	cliff-Loc	he-got stuck
Und	Ref	Br

The antelope got stuck on the cliff.

ngakwi kuru:-tx bxramke
My hand got scratched on a thorn.

johmporsxy nam-tx tehke
The grapes dropped to the ground.

ri:h thala-tin yu:ke
Water leaked from the roof.

ongxyh yahm-tx tohlke
His head got bumped on the door.

ukhxn. lun.-tx tuhmke
His foot got stubbed on a stone.

nga: bxjar-lx ngangoyke
I got lost in the bazaar.

buhtxn theka:-lx byalke
Grease filled up the jug.

bah.oza amae unwi:-tx like
The baby lived on his mother's milk.

ram mxddx onya-tx ngxmke
Ram became addicted to drinking liquor.

6. Receptive Clause Type

+ Sub	NP(Umk)	+ P	VP
Und		R	

ri:h bohke
water Umk it-spilled
Und R
The water spilled.

was thxn.ke
The flower withered.

gohr khyu:ke
The plow wore out.

jwi:h kyahke
The stick broke.

ngamxn. jorke
My dream came true.

kwa kxramke
The cloth scorched.

bxn. zyuhlke
The mountain goat slipped.

ge: geomke
We starved.

ukhxn. goke
His foot swelled.

ram suhke
Ram suffocated.

kwa nahn.ke
The cloth became moth eaten.

bxhres moske
The bread got moldy.

pos soske
The beer-grains fermented.

buhtxn gx:ke
The grease solidified.

syakxri cike
The meat rotted.

pom sa:ke
The snow dried up.

kan. mihn.ke
The food became well cooked.

khurja mahke
The knife got lost.

bxhres	ehlke

Bread was left over.

7. Stative Clause Type

+ Sub	NP(Agt)	+ O	Cl(Rel)	+ P	VP
Sta		Und		S	

no-e	zihm jxy-o	pxyn.zyao
he-Agt	house make-Rel	he-wants
Sta	Und	S

He wants to build a house.

nga:	ehm. ki:-o	ngasxyn.zya

I know how to plow the field.

nga:	nxn.-lay ca-o	ngarxn.[illegible]izya

I see you to be good (you are good looking to me).

ram-e	bxhtanji goh	duzyao

Ram is able to dig potatoes.

8. Descriptive Clause Type

+ Sub	NP(Umk)	+ Pex	Cl	+ P	VP
Sta		Cpl		D	

nga:	nxkx ba ba	ngangxmsizya
I Umk	there going	I-enjoy
Sta	Cpl	D

I enjoy going there.

ram	syakxri kxy kxy	ngxmsizya

Ram enjoys eating meat.

nga:	syan. syan.	ngangxmsizya

I enjoy sleeping.

9. BiAttributive Clause Type

+ Sub	NP(Umk)	+ Ref	NP/Cl(Loc)	+ P	VP
Und		Sit		BA	

ao	yahm-lx	swihn.zya
this Umk	door-Loc	it-fits
Und	Sit	BA

This fits through the door.

palo gyahmo-sx khxyzya
White matches with red.

nga: dohr banya-tx ngatapzya
I am free to go to Dhor.

nxn. baza apnya-tx nxgilzya
You are skillful in shooting birds.

(Reverse order)

nx-lx mi: lizya
There is a man in there.

10. Attributive Clause Type

10a. Ascriptive

+	Sub Und	NP/Cl(Umk)	+	P A	VP

rap tahzya
honey Umk it-is sweet
Und A
The honey is sweet.

ao kan. tu:zya
This food is spicy.

nga: ngazyuhn.zya
I am cold.

mxnxm nxpzya
The meal is fine (grained).

nga: ngada:hzya
I am at leisure.

ʔxm thxyn.zya
The trail food is sufficient.

nga: ngaren.zya
I am delighted.

syakxri ngxrzya
The meat stinks.

ram chxyn.zya
Ram is pure (in his dealings).

kan. ngxmzya
The food is tasty.

ao lun,   giszya
This stone is heavy.

khurja   chazya
The knife is sharp.

ram   sx:zya
Ram is insolent.

sapi   darzya
The salt is potent.

nxzihm   gyc:hzya
Your house is big.

akx linya   bxnizya
Living here is pleasant.

nxkx banya   cyaszya
Going there is scary.

10b. Equative

	Sub	NP(Umk)		Pex	NP(Umk)	
+	Und	specific	+	Cpl	generic	+ Ø verb

mici   sin.
cedar Umk   tree Umk
Und   Cpl
A cedar is a tree.

rxhn.   baza
A pheasant is a bird.

cika: ya:thxn
Barley is a grain crop.

ao   ngajya:
This is my wife.

cipxy   ja:
A brass bowl is a vessel.

ao   gyo:h.o
This is the one that is big.

III. INFLECTED PATTERNS

A. Inflectional Categories

Verb inflections in Kham identify a number of verbal modifications which could semantically be classified into the broad categories: 1) mood, 2) person, 3) number, 4) voice, 5) tense, 6) aspect, 7) modality, and 8) editorials. Following is a very brief description of each of these terms as they are used in this paper. It should be noted here that the main body of material after this brief description is organized with a view to reflecting the surface features of the verbal phrase and not the eight inflectional categories listed above, and therefore an index will be included with the description of each term below in order to accomodate easy reference to the appropriate sub-sections of Section III.

1. Mood

Mood identifies the function of the speech act in a given clause.[9] That is, it is concerned with whether the speech act imparts information, requests information, gives an order, or pronounces a blessing or curse. The various moods expressed in Kham are:

Interrogative
    a. Alternative questions . . . D.1.
    b. Content questions . . . . . . G.1.
    c. Tag questions . . . . F.3d.

Imperative . . . G.2.

Hortative . . . G.3.

Optative . . . . G.4.

Declarative (Used as a basic mood and can be found anywhere that the above moods do not occur.)

2. Person

Person markers have to do with the identification of roles in the clause. In Kham they agree both with the actor and the undergoer (or goal site, when present in BT clauses) in:

1st, 2nd, and 3rd persons . . . C.2., C.4.

3. Number

Number markers in the verbal phrase have to do with the identification of the number of participants in a given role. In Kham the number system co-occurs with the person system. Number is marked for:

Singular, dual, and plural . . . C.2., C.4.

4. Voice

Voice markers in the verbal phrase specify the relationship between the various roles of the clause and their grammatical categories such as subject, object, etc. It specifies, for example, whether the actor is subject or the undergoer is subject. In Kham there are two voices:

Passive voice	C.1., C.4., C.5.
Active voice	C.1., C.2., C.3.

5. Tense

Tense markers relate the time of a given clause to the time of the context. In Kham, four tenses have been distinguished:

Past	C.3., C.5.
Terminate past . . .	C.3.
Present	C.3.
Future	C.3.

6. Aspect

Aspect markers function as event modifiers. They indicate the distribution of an event or state of affairs in time. The various aspects expressed in the verbal phrase in Kham are:

Axiomatic	C.3.
Iterative	C.3.
Past continuous . .	C.6a., D.1b.
Prior past	D.2.
Non-inceptive . . .	D.2.
Impending	D.2.
Perfective	E.1.
Passive perfective.	E.2.
Unrelentive	E.3.

7. Modality

Modality can be thought of as a reality index which states the relationship of a verb to the actual. Anything which transports the statement into the realm of the hypothetical, the non-occurring, the potential, the unreal, the contrary to fact is included here. The various modals expressed in the verbal phrase in Kham are:

Negative	D.1.
Potential	D.3.
Conjecture	E.4.

8. Editorials

Editorial markers express a number of editorial comments, or identify the attitude of the speaker concerning the statement, or his attitude toward the listener. Editorials expressed in the verbal phrase in Kham are:

Partial belief	F.1a.
Speculation	F.1b.
Exclamation	F.2a.
Absolutive	F.2b.
Denial	F.2c.
Disclaimer	F.3a.
Summons for listener's opinion	F.3b.
Summons for listener's agreement	F.3c.
Listener Contra-expectancy	C.6b.

B. The Verbal Phrase Surface Structure

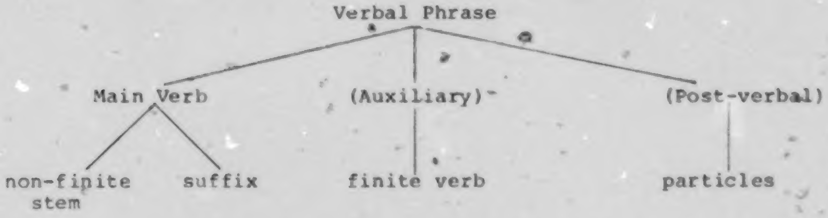

Verbal Phrase
Main Verb
(Auxiliary)
(Post-verbal)
non-finite stem
suffix
finite verb
particles

Figure 25. The basic components of a fully expanded verbal phrase in Kham.

Where the optional auxiliary verb does not occur, the verbal phrase is expanded as follows:

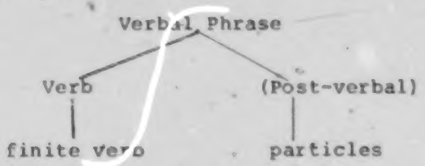

Verbal Phrase
Verb
(Post-verbal)
finite verb
particles

Figure 26. The expansion of a verbal phrase without an auxiliary verb.

It may be seen in Figures 25 and 26 that the auxiliary is a finite verb whenever it occurs. The main verb is a finite verb only when no auxiliary occurs. The finite verb can be expanded as follows, depending on whether it is active or passive in form.

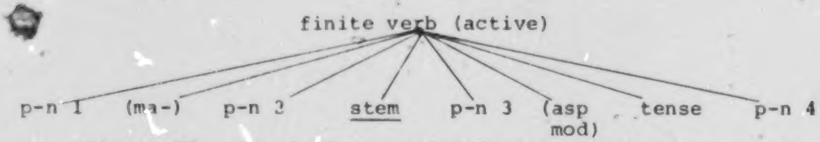


Figure 27. The fully expanded finite system of an active verb.

The following person and number affixes occur in the various p-n positions designated in Figure 27:

p-n 1	1st and 2nd person actors (I, ST, T, BT) 1st and 2nd person undergoers (R, BR)
p-n 2	3rd person undergoers (T, BT)
p-n 3	1st and 2nd person undergoers (T, BT)
p-n 4	3rd person actors (I, ST, T, BT) 3rd person undergoers (R, BR)

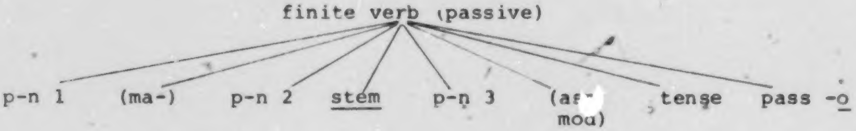


Figure 28. The fully expanded finite system of a passive verb.

The following person and number affixes occur in the various p-n positions designated in Figure 28:

p-n 1	All actors (I, ST, T, BT) All undergoers (R, BR)
p-n 2	3rd person undergoers (T, BT)
p-n 3	1st and 2nd person undergoers (T, BT).

C. Obligatory Elements of the Verbal Phrase

Within the verbal phrase certain elements are obligatorially chosen, while certain other elements (those elements enclosed within parentheses in Figures 25, 26, 27, and 28) are optionally chosen. The obligatory constituents of the verbal phrase in Kham are 1) the verb stem, 2) the person-number affixes, 3) tense, and 4) active or passive verb form.

1. Verb Form

There are two finite verb forms in Kham--the active form and the passive form. To a certain extent, other obligatory elements of the finite system (person-number affixes, tense markers, and the linear arrangement of morphemes) are controlled by the choice of a verb form. For example, the following marking contrasts appear between active and passive verb forms:

Active	Passive
1) -o following tense (zya-o) indicates 3rd person singular actor.	1) -o following tense (zya-o) indicates passive voice.
2) Past tense formed by -ke.	2) Past tense formed by Ø.
3) ya- indicates 3rd person plural undergoer.	3) ya- indicates 3rd person plural actor.
4) rx indicates 3rd person plural actor.	4) rx indicates 3rd person plural undergoer.
5) ma- normally indicates interrogative.	5) ma- indicates negative.
6) 3rd person singular intransitive actor unmarked.	6) 3rd person singular intransitive actor marked by o-.
7) 3rd person actor markers are in suffix position.	7) 3rd person actor markers are in prefix position.

Thus the choice of a verb form is the most basic point from which to begin the illustration of inflectional patterns in Kham. It should be noted here, however, that the passive verb form *does not always have a passive interpretation*. In certain special cases and in cases where post-verbal markers are added to the passive form, the verb can be active in interpretation (see III.C. 5.).

2. Person and Number in Active Verb Forms

Paradigm I illustrates the intersection of actor and undergoer/goal site markers in *active verb form*. Past tense (-ke) is used as a representative tense. Three hyphens (---) are used to represent the position of the verb stem.

Paradigm I.

	Und Act	Singular Undergoers 1st	 2nd	 3rd
Sing	1st	(reflexive)	nga---ni-ke	nga-Ø---ke
	2nd	nx---na-ke	(reflexive)	nx-Ø---ke
	3rd	---na-ke-o	---ni-ke-o	Ø---ke-o
Dual	1st		gin---ni-ke	gin-Ø---ke
	2nd	jin---na-ke		jin-Ø---ke
	3rd	---na-ki-ni	---ni-ki-ni	Ø---ki-ni
Plural	1st		ge---ni-ke	ge-Ø---ke
	2nd	je---na-ke		je-Ø---ke
	3rd	---na-ke-rx	---ni-ke-rx	Ø---ke-rx

		Dual Undergoers 1st	 2nd	 3rd
Sing	1st		nga---cin-ke	nga-ni---ke
	2nd	nx---sin-ke		nx-ni---ke
	3rd	---sin-ke-o	---cin-ke-o	ni---ke-o
Dual	1st	(reflexive)	gin---cin-ke	gin-ra---ke
	2nd	jin---si-ke	(reflexive)	jin-ra---ke
	3rd	---sin-ke-rx	---cin-ke-rx	yara---ki-ni
Plural	1st		ge---ci-ke	ge-ra---ke
	2nd	je---si-ke		je-ra---ke
	3rd	---sin-ke-rx	---cin-ke-rx	yara---ke-rx

Plural Undergoers

		1st	2nd	3rd
Sing	1st		nga---ci-ke	nga-ra---ke
	2nd	nx---si-ke		nx-ra---ke
	3rd	---si-ke-o	---ci-ke-o	ya---ke-o
Dual	1st		gin---ci-ke	gin-ra---ke
	2nd	je---si-ke		jin-ra---ke
	3rd	---si-ke-rx	---ci-ke-rx	yara---ki-ni
Plural	1st	(reflexive)	ge---ci-ke	ge-ra---ke
	2nd	je---si-ke	(reflexive)	je-ra---ke
	3rd	---si-ke-rx	---ci-ke-rx	yara---ke-rx

Examples to Paradigm I.

With Singular Undergoers:

nga: nga-poh-si-ke (reflexive)	I hit myself.
nga: nxn.lay nga-poh-ni-ke	I hit you.
nga: nolay nga-poh-ke	I hit him.
nxn. ngalay nx-poh-na-ke	You hit me.
nxn. nx-poh-si-ke (reflexive)	You hit yourself.
nxn. nolay nx-poh-ke	You hit him.
noe ngalay poh-na-ke-o	He hit me.
noe nxn.lay poh-ni-ke-o	He hit you.
noe nolay poh-ke-o	He hit him.
no poh-si-ke (reflexive)	He hit himself.
gin nxn.lay gin-poh-ni-ke	We(2) hit you.
gin nolay gin-poh-ke	We(2) hit him.
jin ngalay jin-poh-na-ke	You(2) hit me.
jin nolay jin-poh-ke	You(2) hit him.
noni ngalay poh-na-ki-ni	They(2) hit me.
noni nxn.lay poh-ni-ki-ni	They(2) hit you.
noni nolay poh-ki-ni	They(2) hit him.
ge: nxn.lay ge-poh-ni-ke	We hit you.
ge: nolay ge-poh-ke	We hit him.
je: ngalay je-poh-na-ke	You(pl) hit me.
je: nolay je-poh-ke	You(pl) hit him.
norae ngalay poh-na-ke-rx	They hit me.
norae nxn.lay poh-ni-ke-rx	They hit you.
norae nolay poh-ke-rx	They hit him.

With Dual Undergoers:

nga:jinlay nga-poh-cin-ke	I hit you(2).
nga: nonilay nga-ni-poh-ke	I hit them(2).
nxn. ginlay nx-poh-sin-ke	You hit us(2).
nxn. nonilay nx-ni-poh-ke	You hit them(2).
noe ginlay poh-sin-ke-o	He hit us(2).
noe jinlay poh-cin-ke-o	He hit you(2).
noe nonilay ni-poh-ke-o	He hit them(2).
gin gin gin-poh-si-ke (reflexive)	We(2) hit each other.
gin jinlay gin-poh-cin-ke	We(2) hit you(2).
gin nonilay gin-ra-poh-ke	We(2) hit them(2).
jin ginlay jin-poh-si-ke	You(2) hit us(2).
jin jin jin-poh-si-ke (reflexive)	You(2) hit each other.
noni ginlay poh-sin-ke-rx	They(2) hit us(2).
noni jinlay poh-cin-ke-rx	They(2) hit you(2).
noni nonilay yara-poh-ki-ni	They(2) hit them(2).
ni ni poh-si-ki-ni (reflexive)	They(2) hit each other.
ge: jinlay ge-poh-ci-ke	We hit you(2).
ge: nonilay ge-ra-poh-ke	We hit them(2).
je: ginlay je-poh-si-ke	You(pl) hit us(2).
je: nonilay je-ra-poh-ke	You(pl) hit them(2).
norae ginlay poh-sin-ke-rx	They hit us(2).
norae jinlay poh-cin-ke-rx	They hit you(2).
norae nonilay yara-poh-ke-rx	They hit them(2).

With Plural Undergoers:

nga: jelay nga-poh-ci-ke	I hit you(pl).
nga: noralay nga-ra-poh-ke	I hit them.
nxn. gelay nx-poh-si-ke	You hit us.
nxn. noralay nx-ra-poh-ke	You hit them.
noe gelay poh-si-ke-o	He hit us.
noe jelay poh-ci-ke-o	He hit you(pl).
noe noralay ya-poh-ke-o	He hit them.
gin jelay gin-poh-ci-ke	We(2) hit you(pl).
gin noralay gin-ra-poh-ke	We(2) hit them.
jin gelay je-poh-si-ke	You(2) hit us.
jin noralay jin-ra-poh-ke	You(2) hit them.
noni gelay poh-si-ke-rx	They(2) hit us.
noni jelay poh-ci-ke-rx	They(2) hit you(pl).
noni noralay yara-poh-ki-ni	They(2) hit them.
ge: ge: ge-poh-si-ke (reflexive)	We hit each other.
ge: jelay ge-poh-ci-ke	We hit you(pl).
ge: noralay ge-ra-poh-ke	We hit them.
je: gelay je-poh-si-ke	You(pl) hit us.
je: je: je-poh-si-ke (reflexive)	You(pl) hit each other.
je: noralay je-ra-poh-ke	You(pl) hit them.
norae gelay poh-si-ke-rx	They hit us.
norae jelay poh-ci-ke-rx	They hit you(pl).

norae noralay yara-poh-ke-rx	They hit them.
ya ya poh-si-ke-rx (reflexive)	They hit each other.

Paradigm I illustrates all possible combinations of person and number in Stative, Transitive, and BiTransitive verbs. Subtransitive verbs (any verb which is not S, T, or BT) are marked for only one role: actor (or statant) in D, I, and ST; and undergoer in BR, R, BA, and A. The following figure illustrates all possible combinations of person and number in sub-transitive verbs using the past tense -ke as a representative tense.

	number		
person	singular	dual	plural
1st	nga---ke	gin---ke	ge---ke
2nd	nx---ke	jin---ke	je---ke
3rd	---ke-Ø	---ki-ni	---ke-rx

Figure 29. Person and number markers in sub-transitive verbs in active finite verb form.

Examples to Figure 29.

nga: nga-syah-ke	I danced.
gin gin-syah-ke	We(2) danced.
ge: ge-syah-ke	We danced.
nxn. nx-syah-ke	You danced.
jin jin-syah-ke	You(2) danced.
je: je-syah-ke	You(pl) danced.
no syah-ke	He danced.
noni syah-ki-ni	They(2) danced.
norx syah-ke-rx	They danced.

3. Tense in Active Verb Forms

In Paradigm I and Figure 29, past tense -ke was used as a representative tense. Other tenses distinguished in Kham which are applicable to active verb form are:

present	-zya
future	-ya
terminate past	-e

3a. Constraints on the occurrence of tense markers

Past tense -ke and present tense -zya occur in the tense slot preceding p-n 4 (as illustrated in Figure 27).

The terminate past tense marker -e occurs only if:

1. There is no person-number marker in p-n 4 (which is the case when there are 1st or 2nd person actors in T-set clauses or 1st or 2nd undergoers in R, BR clauses);

2. Or where the person-number marker in p-n 4 is Ø (which is the case when there is a 3rd person singular actor in I or ST clauses or a 3rd person singular undergoer in R- or A-set clauses. For more detail, see Figures 12, 14, 15, and 16).

The future tense marker -ya occurs following p-n 4 and not preceding it as do -ke and -zya. When there is no person-number marker in p-n 4 or when the person-number marker is Ø (see 1 and 2 above), future tense is realized as -ya. When there are person-number markers in p-n 4, -ya undergoes certain morphophonemic changes as illustrated in Figure 30.

3rd sg o + ya --→ wa

3rd dl ni + ya --→ nya

3rd pl rx + ya --→ rya

Figure 30. Morphophonemic changes in future tense -ya and 3rd person role markers.

3b. Tense uses

Terminate past. Terminate past tense could properly be called a "chameleon tense." It can be used either as an event tense or as a state tense and depends closely upon the context for its interpretation. In addition to having a past (eventive) meaning, it is also used with an axiomatic sense, and with an iterative (stative) sense. In the following examples, note that the time context may be made explicit with time adverbs. However, time adverbs are not necessary if the time context has been made explicit elsewhere.

kan. zyukx ka:hrx hu-rx (axiomatic)
food when eaten dogs come
When food is eaten, dogs come.

rame ahjyo nxbe:h jxy-o (past)
ram yesterday your basket made
Ram made your basket yesterday.

rame be:h jxy-o (iterative)
ram basket makes
Ram makes baskets (from time to time).

In the final example, the absence of a time adverb plus the absence of a possessive marker on 'basket' (making it baskets in general rather than a specific one) combine to give this clause its iterative sense.

Past tense. Past tense seems, at times, to overlap in use and meaning with terminate past *-e*. In its strictest usage, however, *-ke* is probably not as truly a past tense from the English point of view as is terminate past. Past tense often implies simply that the action of the verb was set in motion sometime in the past and the effects are still in force. For example:

ram ba-*ke*
Ram went. (Similar to the English "Ram left.")

ngaza: syan.-*ke*
My child slept (and is still asleep).

Present tense. Present tense *-zya* carries at least two shades of meaning, dependent upon the context. The *meanings* range from a present continuous sense to a *recent iterative* sense. For example:

ngazihm bxnxy yu:-*zya*
either 'As of late my house is really leaking.'
or 'My house is really leaking (now).'

ram sin.-da ba-*zya*
either 'As of late Ram has been going for firewood.'
or 'Ram is going for firewood.'

norae zihm jxy-*zya*-rx
either 'As of late they have been building a house.'
or 'They are (now) building a house.'

Future tense. Future tense *-ya* is used to predict and is often used as either a warning or an assurance. For example:

caosx bxyyo boh-*ya*
Take it away carefully; it'll spill.

ram achim hu-*ya*
Ram will come today (don't worry).

4. Person and Number in Passive Verb Forms

Paradigm II illustrates the intersection of actor and undergoer markers in *passive verb forms*. In passive forms, past tense is an unmarked form and is used as representative.

Note that all 1st and 2nd person actors (any number) in passive forms are the same as those in active forms both in marking and in ordering. The conversion from active past to passive past is made simply by deleting the tense marker -ke and adding the passive marker -o. For example, given the active form nga-poh-ni-ke 'I hit you,' the passive would be nga-poh-ni-o. Thus, to include 1st and 2nd person actors in Paradigm II would be redundant. 3rd person actor forms, however, are substantial enough in their changes to require illustration in a paradigm (see also Figures 14, 15, and 16).

Paradigm II.

3rd Person Actors	1st	2nd	3rd
	Singular Undergoers		
singular	o---na-o	o---ni-o	o-0---o
dual	ni---na-o	ni---ni-o	ni-0---o
plural	ya---na-o	ya---ni-o	ya-0---o
	Dual Undergoers		
singular	o---sin-o	o---cin-o	o-ni---o
dual	ya---sin-o	ya---cin-o	ni-ra---o
plural	ya---sin-o	ya---cin-o	ya-ra---o
	Plural Undergoers		
singular	o---si-o	o---ci-o	o-ra---o
dual	ya---si-o	ya---ci-o	ni-ra---o
plural	ya---si-o	ya---ci-o	ya-ra---o

5. Tense in Passive Verb Forms

The past tense used as a representative tense in Paradigm II has a sense of terminance. It is marked by 0 immediately preceding the passive marker -o. The only other tense possible in the passive is a continuous tense which is indicated by the insertion of the morpheme -zya into the tense slot immediately preceding the passive marker -o (see Figure 28).

Note that the passive verb form is used for sub-transitive verbs as well as transitive verbs. The sub-transitive verbs consistently pattern after the transitive verbs with 3rd person singular undergoers (which are unmarked).

Note that passive voice carries with it a concomitant shift in natural word order in the clause. That is, the order Act, Und-(Sit), P shifts to Und-(Sit), Act, P. This is illustrated in the following examples:

ao zihm rame o-jxy-o
this house ram 3sA-stem-p
This house was built by Ram.

ao zihm rame o-jxy-zya-o
this house ram 3sA-stem-pres-p
This house was being built by Ram.

nga-kwa kuru:e u-ci:-o
my-clothes briars 3sA-stem-p
My clothes were torn by briars.

nga-kwa kuru:e u-ci:-zya-o
my-clothes briars 3sA-stem-pres-p
My clothes were being torn by briars.

ao sohmlo nga: nga-ra-en-o
this three I 1sA-3pU-stem-p
These three were sheared by me.

ao sohmlo nga: nga-ra-en-zya-o
this three I 1sA-3pU-stem-pres-p
These three were being sheared by me.

6. Exceptions to the Passive Interpretation of Passive Verb Forms[10]

The passive verb form is passive in force only when the word order is Und-(Sit), Act, P as illustrated above. In certain specialized contexts, the active word order is used with the passive form. In such cases, the meaning is active but with special semantic overtones. At the time of writing, the passive form is known to be used for:

1) Passive voice (when accompanied by the word order Und-[Sit], Act, P).

2) Past continuous aspect (when used with the present tense marker only). It is signalled by an active word order.

3) Listener contra-expectancy (when used with past tense only). It is signalled by an active word order.

4) A base form for tag questions and certain editorial

markers. These need the addition of appropriate postverbal particles. (See III.F. for the treatment of these.)

6a. Past continuous aspect

When present tense is used with the passive verb form but with an active word order, it is to be interpreted as past continuous aspect. It cannot occur except in a past time setting. Consider the following examples:

ho chyam bahdure ehn. o-goh-zya-o
that day Bahdur field 3sA-stem-pres-p
On that day Bahadur was digging in his field.

ya-zihm-kx nga-ba-kx kan. ya-zyu-zya-o
their-house-at I-went-when food 3pA-stem-pres-p
When I went to their house they were eating.

har-rx o-ra-pi:-zya-o
cow-pl 3sA-3pU-stem-pres-p
He was milking the cows.

ho chyam la: li: nga-ap-zya-o
that day arrow bow 1sA-stem-pres-p
On that day I was shooting my bow and arrows.

6b. Listener contra-expectancy

When past tense is used with passive form but active word order, it is to be interpreted as information contrary to the listener's expectation. Consider the following examples:

nx-kx-zx o-ra-ja:h-o
there-at-FE 3sA-3pU-stem-p
He put them right there (just keep looking--you'll find them).

nga: gohga nga-chal-o
I corn 1sA-stem-p
I weeded the corn (I know you think I didn't do anything, but I did do something).

D. Optional Expansions of the Verbal Phrase--Affixes

1. The Affix ma-

The affix ma- is used both as a question marker (alternative type) and as a negative marker and is highly dependent upon verb form and tense for its proper interpretation. In general, ma- occurs as an interrogative marker in active verb form and only as a negative marker in the passive verb form. Although the affix occurs also in connection with aspect, modals, and auxiliaries, it is most easily treated here before the introduction of such elements because of its close interplay with tense and voice.

1a. *ma-* in active verb forms

The affix *ma-* when used with active verb forms has two possible semantic interpretations depending both upon the tense being used and upon the immediate context. Such is illustrated in Figure 31.

Tense	Semantic Interpretation
present	interrogative only
future	interrogative only
past	interrogative or negative. The difference between the interrogative and the negative use of *ma-* is marked whenever there is a person number affix other than Ø in position p-n 4. Otherwise the interpretation of *ma-* is dependent upon context.
terminate	interrogative or negative (interpretation dependent upon context)

Figure 31. The semantic interpretation of the affix *ma-* as controlled by various tenses in active voice.

Figure 31 states that whenever there is a non-zero person number affix in p-n 4, the difference between the interrogative *ma-* and the negative *ma-* is formally marked. Figure 32 shows how this difference is marked. For purposes of illustration, only third person undergoers have been used. The difference between interrogative and negative is marked in the same way with first and second person undergoers. In all instances the interrogative is marked by a switch in the normal order of the tense slot with respect to p-n 4.

The interrogative use of ma- (tense switching). The interrogative interpretation of *ma-* is accompanied by a switch in the interpretation of past and future tense markers. That is, where *ma-* is interpreted as interrogative, the normal future tense marker *-ya* is interpreted as a past tense marker, and the normal past tense marker -ke is interpreted as a future tense marker. This is illustrated in the following examples.

	3rd Actors	3rd Undergoers sing	dual	plural
sing	neg	ma---ke-o	ma-ni---ke-o	ma-ra---ke-o
	intrg	ma---o-ke	ma-ni---o-ke	ma-ra---o-ke
dual	neg	ma---ki-ni	ma-ra---ki-ni	ma-ra---ki-ni
	intrg	ma---ni-ke	ma-ra---ni-ke	ma-ra---ni-ke
pl.	neg	ma---ke-rx	ma-ra---ke-rx	ma-ra---ke-rx
	intrg	ma---rx-ke	ma-ra---rx-ke	ma-ra---rx-ke

Figure 32. The marked difference between the interrogative and negative uses of ma- in past tense.

Examples.

nxtx sya nx-sxyh-ya (norm)	You'll kill some game up there.
nxtx sya nx-ma-sxyh-ya	Did you kill some game up there?
rame be:h jxy-wa (norm)	Ram will make a basket.
rame be:h ma-jxy-wa	Did Ram make the basket?
nga: sya nga-sxyh-ke (norm)	I killed some game.
nga: sya nga-ma-sxyh-ke	Will I kill any game?
rame be:h jxy-ke-o (norm)	Ram made a basket.
rame be:h ma-jxy-o-ke	Will Ram make a basket?

Terminate past tense and past tense (as marked by what is normally the future tense marker -ya) contrast in meaning in an unusual way when they are in the interrogative mood (marked by ma-). This contrast does not exist in the declarative mood. Note the following examples:

ram nxn.sx ma-ba-e	Has Ram gone with you? (I can't find him anywhere)
ram nxn.sx ma-ba-ya	Did Ram go with you?
ram akx ma-li-e	Has Ram stayed here? (He's been lost)
ram akx ma-li-ya	Did Ram stay here? (Or did he go?)
ngakhorcyo nx-ma-rxn.-e	Have you seen my knife? (I lost it)
ngakhorcyo nx-ma-rxn.-ya	Did you see my knife? (Let me show it to you)

The negative use of ma-. As illustrated in Figure 31, *ma-* when *used with present and future* tense markers denotes only an interrogative. How, then, are the negative present and negative future tenses formed? The negative present tense makes use of the terminate past tense marker *-e*. Perhaps a more accurate statement would be that the distinction between terminate past and present collapses with the negative. Thus, the statement "He didn't do it" could be in reply to "Did he do it?" or "Is he doing it?."

The negative future tense is marked by Ø. That is, *ma-* plus Ø is indicative of the negative future. Where there are *no* person-number markers (or Ø) in p-n 4, then, *both* the tense slot and p-n 4 are blank. Where there *are* person-number affixes in p-n 4, they occur as usual. This *is* illustrated in Figure 33.

	p-n 1	ma-	p-n 2	stem	p-n 3	tense Ø	p-n 4
1.	nga	ma	ra	cyu:			
	I won't watch them						
2.	nga	ma		cyu:	ni		
	I won't watch you						
3.		ma	ra	cyu:			rx
	They won't watch them						
4.		ma		cyu:	sin		o
	He won't watch us(2)-						

Figure 33. Sample combinations of person-number affixes in a negative future T clause. Cf. Figures 12 and 27.

Note the potential ambiguity which arises where person-number affixes occur in p-n 4. As noted earlier, the terminate past tense marker *-e* does *not* occur where there are person-number markers in p-n 4. At *this* point, then, a potential ambiguity arises between negative terminate past and negative future:

ma-ba-(e)-rx --→ ma-ba-rx They didn't go.

ma-ba-Ø-rx --→ ma-ba-rx They won't go.

1b. *ma-* in passive verb forms

The affix *ma-* does not have an interrogative interpretation in the passive *verb* forms as it does in the active forms. In the passive, *ma-* is always interpreted as a negative marker. The negative *passive* has been observed only 1) in tag questions and editorials involving post-verbal particles, and 2) with a form which would otherwise be either a present passive or a past continuous form. The use of negative passive with post-verbal particles may be illustrated as follows: (For a fuller treatment of post-verbal particles, see III.F.)

achim eskul-da nx-ma-ba-zya-o ro
today school-to you-neg-go pres-p P.V.
Aren't you going to school today?

o-ma-ba-o zx
he-neg-go-p P.V.
He didn't go!

The use of the negative passive with the form which otherwise would be present passive or past continuous (see III.C.6a.) involves the reinterpretation of that form as an expression of contempt or bitterness. Otherwise, neither passive nor past continuous forms can be negated in Kham by the use of ma-.

nxm obelotx o-ma-jxyzyao
He won't make it when the rain stops. (He keeps on working even in the rain--the fool!)

nxn.sx o-ma-bazyao
He won't go with you (I sure wish he would).

2. Aspect Affixes

Aspect affixes occur immediately following p-n 3 and immediately preceding the tense slot (see Figures 27 and 28). These affixes are closely linked with time concepts and may be viewed as modifications of the tense system. Indications of this may be seen in the rather severe restrictions on the combination of tense and aspect shown in Figure 34.

	past -ke	present -zya	future -ya	term past -e
impending -ri	-ri-ke	-ri-zya	xxx	xxx
prior past -du	-du-ke	xxx	xxx	xxx
non-inceptive ma- -ta	xxx	xxx	xxx	ma--ta-e

Figure 34. The co-occurrence constraints of tense and aspect affixes.

Following are examples of the aspect affixes given in Figure 34:

impending aspect

ram gyo:h.o ta-ri-zya
Ram will be great someday (sure but distant).

ram gyo:h.o ta-ri-ke
Ram is about to become great.

prior past aspect

ram ba-du-ke
Ram already went.

rame be:h jxy-du-keo
Ram already made the basket.

non-inceptive aspect

ram ma-ba-ta-e
Ram hasn't gone yet.

rame ngalay ma-cyu!na-ta-o
Ram hasn't seen me yet.

3. The Potential Modal Affix

In Kham there is but one modal expressed by an affix--the potential modal. Other modals are expressed either by auxiliaries or by main verbs. The potential modal modifies the central meaning of the verb itself and has nothing to do with time concepts as did the aspect affixes. The affix used is -du, the same affix as is used for prior past aspect. When -du occurs with past tense, it is to be interpreted as prior past aspect. When -du occurs with any other tense it is to be interpreted as the potential modal as illustrated in the following examples:

nga: no han.tx ngaguhm-du-e	I can climb that cliff.
noe zihm jxy-du-wa	He may be able to build a house.

The potential modal occurs with only one of the three aspect affixes discussed above, the non-inceptive aspect ma- -ta, and the order of occurrence is always -du -ta, as illustrated in the following example:

ram-e o-ka:h ma-dxy-du-ta-o
Ram has not been able to find his dog yet.

E. Optional Expansions of the Verbal Phrase--Auxiliaries

Auxiliary verbs, like the affixes discussed above, are used to express concepts of aspect and modality. There are numerous other aspects and modals in Kham which are expressed by main verbs to which clauses are embedded, and such embeddings will be treated in Section IV.4. The aspects expressed by auxiliaries in Kham are 1) the perfective (active and passive) and 2) the unrelentive. The one modality so expressed is that of conjecture.

Note that where the auxiliary option is chosen, the finite system discussed above occurs on the auxiliary verb and not on the main verb. The main verb becomes non-finite. Furthermore, the finite system which does occur on auxiliaries is restricted in that neither aspect nor modality affixes co-occur with it (see Figures 27 and 28). The tense system also is usually restricted to either one or two tenses for a given form.

Where auxiliaries are chosen, the main verb in its non-finite form receives one of several possible suffixes predetermined by the auxiliary verb. Stated differently, a given auxiliary will occur only in the presence of a given suffix on the main verb. In the following examples, observe the suffixes -dx, -o, and -nya.

1. Perfective Aspect Auxiliary

sub-transitive verbs	-dx le
transitive verbs	-dx nxy.o

The perfective aspect auxiliary is restricted to a single tense: terminate past (which is used to indicate a continuing state). Following are examples of its use and meaning:

achim zyuhn.-dx le
It has become cold today.

bazarx si-dx le-rx
The chickens have died.

nga: nxkx ba-dx nga-ma-le
I have not gone there.

nga: nxn.lay rxn.-dx nga-nxy-ni-o
I have seen you (before).

2. Passive Perfective Aspect Auxiliary

This aspect occurs only on ST, T, and BT verbs. It is formed by adding -si-o li-zya to the stem. Consider the following examples:

alx ri:h ja:h-si-o li-zya
Water has been put in here.

ao usio ma:hkx, ao sxyh-si-o li-zya
This didn't just die, it has been killed.

ao zihmlx li-si-o li-zya
This house has been lived in.

3. Unrelentive Aspect Auxiliary

sub-transitive verbs	V-o ka	V-ozx li-
transitive verbs	V-o ka	V-ozx nxy-

V=main verb stem

Unrelentive aspect may combine either with past tense or with present tense. Consider the following examples:

achim bxnxy wa-o ka wa-ozx li-zya
Today it keeps raining and raining without letup.

marrx pxl-o ka pxl-ozx yara-nxy-ke-rx
They kept on killing and killing sacrificial animals without letup.

4. Conjecture Modal Auxiliary

The conjecture modal -nya -le has been found only in the apodosis ("then" clause) of conditional sentences. For example:

nga: wasx ngadxykin, nga: gxran.-nya nga-le
If I can obtain medicine, I will become well.

nga: wasx ngadxykin, nga: gxran.-nya nga-le-o
If I had obtained medicine, I would have become well.

F. Optional Expansions of the Verbal Phrase--Post-Verbal Particles

Post-verbal particles belong chiefly to an editorial system; that is, they express a number of editorial comments or speaker attitudes about the information being spoken. Those expressed in Kham are 1) partial belief, 2) speculation, 3) exclamation, 4) absolutive, 5) denial, and 6) disclaimer. Post-verbals also express speaker attitudes about the listener such as a summons for his opinion or a summons for his agreement. In addition, one post-verbal--the tag question--asks for a confirmation of what the speaker believes to be true. Certain of these post-verbals occur only with the active verb form and others only with the passive verb form. The following examples are grouped to reflect these constraints.

1. Post-Verbal Particles Which Occur Only with Active Verb Forms

1a. Partial belief

The partial belief particle implies that the speaker is willing to accept the statement tentatively but has certain reservations and would like to see the evidence for himself. "Tall stories" told in the village are often punctuated from the audience by *hxyzx takhyo*, *hxyzx takhyo* 'possibly so, possibly so.' Partial belief is marked by *-khyo* for all persons and numbers except 3rd dual and 3rd plural which are marked *-kheno* and *-khero* respectively. *-khyo* occurs in place of the tense marker *-ke* when the clause is in past tense and immediately following the tense marker *-zya* when the clause is in present tense.

Examples.

hxyzx ta-*khyo*
It may have happened that way (although I wonder about it).

nxn. nx-ba-*khyo*
You may have gone (although I wonder about it).

zihm jxy-zya-*khero*
They might be building a house((although I wonder about it).

1b. Speculation

Speculation occurs only in the 3rd person. It is marked by what appears to be a combination of past and future tense markers: *-kya*, *-kinya*, and *-kerya* for singular, dual, and plural persons respectively. These markers may also occur following the present tense marker *-zya*.

Examples.

ram ba-du-*kya*
Ram has probably already gone.

nganxyn.ni hu-zya-*kinya*
My two friends are probably coming.

mxhrrx nxgohr ma-jxy-*kerya*
The blacksmiths probably haven't made your plow.

2. Post-Verbal Particles Which Occur Only with Passive Verb Forms

2a. Exclamation

Exclamation is marked by the addition of the post-verbal particle leo to the passive verb form. It implies that the act has happened in the past but is just newly discovered with a touch of surprise.

Examples.

obaduo leo
Well I'll be, he already went!

ehn. uki:zyao leo
Well I'll be, he's been plowing his field!

nxkxzx oleo leo
Well I'll be, he was right there all along!

2b. Absolutive

Absolutive is marked by the addition of the post-verbal particle zx to the passive verb form. It asserts that the statement is absolute truth and beyond dispute in the mind of the speaker. It is used commonly in an argumentative context.

Examples.

obao zx
He did go (I saw him with my own eyes).

be:h ojxyzyao zx
He was too making a basket!

2c. Denial

Denial is marked by the addition of the negative particle ma:hkx to the passive verb form. It can be viewed as the negative form of the absolutive marker illustrated above, in that it asserts beyond doubt that the statement is false. Note that this is the form used to negate a passive construction. It is the construction as a whole which is negated in the passive and not the action itself (which would be true were ma- used in the passive verb. This may help account for the fact that ma- does not occur with the passive verb.) Such appears to be true of the English passive also.

Examples:

ao zihm rame ojxy.o ma:hkx
This house was not built by Ram. (Or, 'That this house was built by Ram is not true.')

rame be:h ojxy.o ma:hkx
It was not a basket that Ram made.

3. Post-Verbal Particles Which Occur with Either Active or Passive Verb Forms

3a. Disclaimer

The disclaimer absolves the speaker of responsibility for the truth of the statement. He claims that what he says is hearsay.

The discourse status of the sentence qualified by the disclaimer appears to be reflected in the form of the verb. The passive form is used in disclaimers of background material; the active form is used in disclaimers associated with the main narrative (see footnote 10).

Narrative (active forms):

no sero tubu ri: inarlx li-ke di
It is said that the old man stayed in the well one whole night.

gohra cepdx raja hu-zya di
It is said that the king is coming riding a horse.

johmpasxy ti:dx rxyyo, hxy ta-ke di
"Pick some strawberries and bring them," he said (so goes the story).

Background (passive forms):

nxlx dan.chi chwi:dx o-e-o di
(Sometime before) he had stuffed pitch-pine in there, it is said.

syal kun.lx lwi:hsidx o-le-o di
The fox had (already) crawled into a hole, it is said.

nehrihmpxy nxm o-mawa-o di
It is said that it had not rained for two years.

3b. Summons for listener's opinion

A summons for the listener's opinion is marked by the post-verbal particle sa. It implies that the speaker is a bit unsure of his statement and wants to know the listener's opinion.

Examples.

no: te kapcegazx sa
Maybe that's an eagle (what do you think?).

no: ma:hkx sa
That's not the one, do you think?

ram mabae sa
Ram didn't really go, do you think?

The particle sa is also used effectively in expressing a person's inner questionings. For example:

gohga ukuzyao sa lidx cyu:nakeo
Saying (to himself), "You don't suppose he's stealing my corn, do you?" he went to look.

3c. Summons for listener's agreement

sa also appears as the first part of the compound particle sa-ni. In this use it constitutes a request for agreement on the part of the listener.

Examples.

achim bxnxy zyuhn.zya sa-ni
It's really cold today, isn't it!

ao cao take sa-ni
This has become nice, hasn't it!

rame uzihm majxytao sa-ni
Ram hasn't made his house yet, has he!

3d. Tag questions

The tag question asks for a confirmation of what the speaker already believes to be true or at least what seems to be true. It is often used as a polite form of greeting. The tag question is marked by the particle ro following the verb. Although it is used on both active and passive verb forms, it is far more common with the passive form. It has not yet been determined under what discourse conditions it is used in the active form.

Examples.

sin. nxgurzyao ro
Are you carrying firewood? (Used as a form of greeting when meeting someone on the trail carrying firewood. It is simply

a way of acknowledging his existence.)

akx nxhun.o *ro*
Did you come here? (A polite way of recognizing someone's arrival at your house.)

achim eskulda nxmabazyao *ro*
Aren't you going to school today? (You don't act as if you are.)

rame be:h majxy.o *ro*
Doesn't Ram make baskets? (I thought he did, although now it doesn't look like he does.)

G. *Mood*

Both the indicative and interrogative moods have been illustrated in our discussion of the various categories marked in the verb. Here it is necessary to add only brief description of the other uses of the interrogative mood. The three other moods distinguished in Kham--the imperative, hortative, and optative--are described fully in this section. These three are interrelated but will be treated separately.

1. Interrogative Mood

Alternative-type questions with *ma-* and tag questions with *ro* were discussed in sections D.1. and F.3d respectively. A third type, *content questions*, contains words such as *what*, *where*, *why*, *who*, etc. This type of question, when used with active verb form, follows the pattern of tense switching which accompanies the interrogative use of *ma-*. As previously described (see Section III.[illegible].1a), the switch is in the interpretation of past and future tense markers: the normal future tense marker *-ya* is interpreted as a past tense marker, and the normal past tense marker *-ke* is interpreted as a future tense marker. For comparison of both types of tense switching with the normal use of these tenses, note the following examples:

ram ba-ya (norm)	Ram will go.
ram *ma*-ba-ya	Did Ram go?
ram *kharkx* ba-ya	When exactly did Ram go?
rame be:h jxy-ke-o (norm)	Ram made a basket.
rame be:h *ma*-jxy-o-ke	Will Ram make a basket?
rame *kata* jxy-o-ke	What is it that Ram will make?

It is also interesting to note the difference between the interpretation of active and passive content questions. Passive content questions range in interpretation from expressions of general curiosity to expressions of polite greeting similar in nature to the English "How are you doing?" Active content questions, on the other hand, indicate a speaker involvement which demands a specific answer. This difference may be seen in the following examples:

kana nx-ba-zya-o (passive form)	Where are you going? (a polite greeting or general curiosity)
kana nx-ba-zya (active form)	Where are you going? (a demand)
kxy u-li-zya-o (passive form)	What is he saying? (implies that I can't hear or understand)
kxy li-zya (active form)	What is he saying? (implies that I am asking for his stand on a certain issue)
kata u-cyu:-o (passive form)	What did he see?
kata cyu:-wa (active form)	Which one did he see?

2. Imperative Mood

The imperative mood in Kham, like other moods, marks person and number in both actor and undergoer roles and has as well a limited tense system and certain attitude markers. Person and number in the case of the actor, of course, are limited to 2nd person. Also, person and number in the case of the undergoer are limited to reflexive in the 2nd person. Interestingly, the imperative actor markers are the same as the undergoer markers in the declarative mood.

Paradigm III illustrates the intersection of actor and undergoer markers in the imperative mood.

Examples.

cyu:-na-ke	Look at me.
cyu:-sin-ke	Look at us(2).
cyu:-si-ke	Look at us.
cyu:-si-n-ke[11]	Look at yourself.
cyu:-ke	Look at him (it).
ni-cyu:-ke	Look at them (2).
ya-cyu:-ke	Look at them.
cyu:-na-cin-ke	You(2) look at me.
cyu:-si-cin-ke	You(2) look at us(2).
cyu:-si-ci-ke	You(2) look at us. (ambiguous)

cyu:-si-cin-ke	You(2) look at yourselves.
cyu:-cin-ke	You(2) look at him.
ya-cyu:-cin-ke	You(2) look at them(2) (ambiguous)
ya-cyu:-cin-ke	You(2) look at them.
cyu:-na-ci-ke	You(pl) look at me.
cyu:-si-ci-ke	You(pl) look at us(2). (ambiguous)
cyu:si-ci-ke	You(pl) look at us.
cyu:-si-ci-ke	You(pl) look at yourselves.
cyu:-ci-ke	You(pl) look at him.
ya-cyu:-ci-ke	You(pl) look at them(2). (ambiguous)
ya-cyu:-ci-ke	You(pl) look at them.

Paradigm III.

Actor - 2nd person

	Und	singular	dual	plural
	sing	cyu:-na-ke	cyu:-na-cin-ke	cyu:-na-ci-ke
1st	dual	cyu:-sin-ke	cyu:-si-cin-ke	cyu:-si-ci-ke
	pl.	cyu:-si-ke	cyu:-si-ci-ke	cyu:-si-ci-ke
	sing	cyu:-si-n-ke		
2nd	dual		cyu:-si-cin-ke	
	pl.			cyu:-si-ci-ke
	sing	cyu:-ke	cyu:-cin-ke	cyu:-ci-ke
3rd	dual	ni-cyu:-ke	ya-cyu:-cin-ke	ya-cyu:-ci-ke
	pl.	ya-cyu:-ke	ya-cyu:-cin-ke	ya-cyu:-ci-ke

Intransitive verbs.

singular	dual	plural
ba-ni-ke	ba-cin-ke	ba-ci-ke

Intransitive examples.

ba-ni-ke	Go.
ba-cin-ke	You(2) go.
ba-ci-ke	You(pl) go.

2a. Tense on imperative mood

The imperative mood has a limited tense system consisting of two tenses. One is the immediate tense, marked by -ke, which was illustrated in Paradigm III. The other tense is non-immediate and implies that the act may be done anytime in the future. It is marked by Ø in singular and dual intransitive verbs and by -yo in plural intransitive and all transitive verbs.

Examples of imperative tenses.

hu-ni-ke	Come here. (immediate)
txcha phxri hu-ni Ø	Come again someday. (non-immediate)
ba-ci-ke	Go away. (pl) (immediate)
caosx ba-ci-yo	Travel well. (pl) (non-immediate)
alx ja:h-ke	Put it in here. (immediate)
alx ja:h-yo	Put it in here (when you get the chance). (non-immediate)
yahm phxy-ke	Open the door. (immediate)
ngahukx yahm phxy-yo	When I come, open the door. (non-immediate)
so-cin-ke	Get up. (immediate)
chx bxjikx so-cin Ø	At six o'clock get up. (non-immediate)

2b. Negative imperative

The negative imperative in Kham occurs only in the non-immediate tense. It is marked by the prefix ta-. For example:

ta	Don't.
ta-ba-ni	Don't go.
ao bxri ta-zyu-cin	Don't eat any of these (dual).
ngalay ta-poh-na-yo	Don't hit me.
ta-cxlxy-ci-yo	Don't fiddle with that (pl).
ta-ra-e-yo	Don't give it to them.
ta-ra-pxrin.-ci-yo	Don't send them (pl).

2c. Urgent imperative

There is an urgency affix -sa which can be used with the imperative. It often implies impatience as well as urgency. -sa occurs immediately before the immediate tense marker -ke. It is also found to occur without -ke.

Examples.

yahm phxy-sa	Hurry up and open the door.
can.do ba-ci-sa	Hurry up and go.
phi:-sa-ke	Take it off the fire, quick.
cyu:-na-sa-ke	Watch me, quick.
sxyh-cin-sa	Hurry up and kill it (dual).

3. Hortative Mood

The hortative mood, like the imperative, is used to convey a command. In the imperative the command is addressed to a second person hearer, whereas in the hortative the command is addressed either to a first person hearer or indirectly to a third person hearer.

3a. 1st person hortative

The hortative mood occurs with both 1st and 3rd person actors but is marked differently for each. 1st hortative is restricted to dual and plural actors and to 3rd person undergoers, as illustrated in Figure 35.

		3rd Undergoer	
		singular	dual & pl.
1st	dual	gin-cyu:	gin-ra-cyu:
	pl.	ge-cyu:	ge-ra-cyu:

Figure 35. Person and number in the 1st person hortative mood.

Note that the 1st person hortative is recognized by the fact that it has no tense markings. Consider the following examples:

gin-cyu:	Let's (2) look at it.
gin-ra-cyu:	Let's (2) look at them (2 or pl).
ge-cyu:	Let's look at it.
ge-ra-cyu:	Let's look at them (2 or pl).

3b. 3rd person hortative

The 3rd person hortative expresses not so much a desire as it does a lack of concern regarding the activities of a third person. It is here that the 3rd person hortative contrasts with the optative (which will be treated next) in that the optative expresses an honest desire in the mind of the speaker. The 3rd person hortative is marked by the addition of the prefix gxh- and the suffix -kx. Any combination of 3rd person actors with 1st, 2nd, or 3rd person undergoers is free to occur in the order illustrated in Figure 36.

gxh--3rd--stem--1st or--tense--3rd Act--kx
Und 2nd Und

Figure 36. The order of morphemes in the 3rd person hortative mood.

Examples to Figure 36.

With iterative tense.

gxh-cyu:-na-kx	Let him look at me (who cares?).
gxh-cyu:-si-kx	Let him look at us (who cares?).
gxh-ra-cyu:-kx	Let him look at them (who cares?).
gxh-cyu:-rx-kx	Let them look at it (who cares?).

With present continuous tense.

gxh-cyu:-na-zya-kx	Let him keep on looking at me (who cares?).
gxh-cyu:-si-zya-kx	Let him keep on looking at us (who cares?).
gxh-ra-cyu:-zya-kx	Let him keep on looking at them (who cares?).
gxh-cyu:-zya-rx-kx	Let them keep looking at it (who cares?).

The hortative marker gxh- can also be used in conjunction with the non-immediate imperative tense -yo. The result is an imperative of extreme politeness. For example:

gxh-ba-yo hort-stem-ipr	Go ahead and allow yourself to go, if you must.
gxh-zyu-yo hort-stem-ipr	Please allow yourself to eat some more.
gxh-hu-yo hort-stem-ipr	Please allow yourself to come if you can.

4. Optative Mood

As mentioned above, the optative mood expresses a sincere desire in the mind of the speaker. It is used chiefly for blessings or curses. The optative occurs in both 2nd and 3rd persons and is used, to the author's knowledge, exclusively in receptive-type clauses. Thus the ordering of morphemes differs from the ordering in the hortative, as illustrated in Figure 37.

2nd or ---stem---kx
3rd Und

Figure 37. The ordering of morphemes in the optative mood.

Examples to Figure 37.

umin bxnxy o-thas-kx
May his name become well known.

nxn. bxnxy nx-ser-kx
May you live to an old age.

macao oen u-buhgi-kx
May he bear the guilt of his evil.

IV. DERIVED PATTERNS

Generally, a clause may be considered to belong *inherently* to a given cell in the transitivity matrix when the following stipulations have been met:

1) The predicate must consist of a simple verb where no optional expansions of the finite system or derivation system have been exercised.

2) All nuclear roles which sub-categorize the verb must be capable of realization as free forms. (It should be kept in mind that *only* nuclear items which sub-categorize the verb are taken into account in determining the inherent type.)

Thus the predicate in Kham is being treated as central to the sememic classification of a clause (whether inherent or derived) in that it controls a set of case relations in terms of Act, Und, and Sit which are said to sub-categorize the predicate. The verb *jxykeo* 'he-made-it,' for example, is classified as Transitive because its full expansion in terms of nuclear roles is + Act, + Und. The actor and/or undergoer, of course, may be deleted from the clause where certain focus considerations have applied. Even then, however, *jxykeo* 'he-made-it' is still treated as Transitive for the following reasons: 1) the actor and undergoer are still present sememically, being understood from context, 2) they can be supplied, and 3) they are marked in the verb. Thus actor and undergoer deletions with forms such as *jxykeo* are non-contrastive and do not affect transitivity classification. Such rules are therefore excluded from consideration in the derivations summarized in Figure 42 (Section IV.C).

When the two stipulations for inherent clauses have not been met, the clause in question, although given a place in the transitivity matrix, is said to have been *derived* from a cell elsewhere in the transitivity matrix. The cell from which it was immediately derived, however, may or may not be the inherent cell for that verb. That is, a series of one or more derivations may have applied to the inherent type before it arrived at the point in question. This series or chain of derivations is known as the *derivational history* of the clause. The inherent cell of any derived clause will not be arrived at until the total derivational history has been retraced. As illustration, observe the following four clauses:

harnwi ngxm-zya
Und state The milk is delicious.

harnwi boh-dx le
Und state The milk has spilled.

harnwi goyn.-si-o lizya
Und state The milk has been measured.

harnwi sx-mwin.-si-o lizya
Und state The milk has been warmed.

Note that all four clauses consist of an undergoer and a state. It can be said, then, that all rightfully belong to the Attributive cell. With recourse to the rules, however, it becomes evident that only the first example belongs *inherently* to the Attributive cell. The other three have been *derived* into the Attributive cell: the first of the three from an inherently Receptive clause, the second from an inherently Transitive clause, and the last of the three from an inherently Attributive clause. The third, in other words, *began* in the Attributive cell but was derived out of that cell and back again. This too becomes a derived Attributive clause.

The set of rules by which clauses may be derived from one point on the transitivity matrix to another may be grouped into two major types: 1) contrastive rules and 2) non-contrastive rules. Contrastive rules are registered in the verbal phrase either by affixes or auxiliaries with the result that the emergent clause contrasts with the original clause in its potential of nuclear roles, its discourse category, or its grammatical arrangement of roles. For example, actor and/or undergoer deletions are marked in the verb by *-si* as in *jxy-si-ke* 'made it' or *jxy-si-si-ke* 'became make-able.' These rules are viewed as contrastive,,for they yield a construction in which the full expansion of the clause nucleus is contrastively different from the parent form. Deleted roles marked in the verb by *-si* cannot be made explicit. Such deletions are viewed as contrastive.

Non-contrastive rules, on the other hand, are simply rules which allow for the optional deletion of various nuclear roles. There are only two non-contrastive rules by which clauses may be derived: the undergoer replacement rule (Ur), which provides for the non-contrastive replacement of undergoer by site, and the non-contrastive undergoer deletion rule (nUd), which applies to a small sub-class of Attributive verbs. Optional deletion of various nuclear roles may also occur as a function of the focus system and as such were treated in Section II.A.3. The two non-contrastive derivation rules are distinct from these focus rules in that items deleted by focus rules are uniquely recoverable from context. The items deleted or replaced by Ur or nUd are recoverable not from context but from acknowledge of the rules. Without a knowledge of the rules, these derived types would be viewed as inherent, contrastive types.

The two non-contrastive rules are described below, followed by a description of the 5 basic types of contrastive rules, classified by the kinds of operations which they perform: 1) rules that add actors, undergoers, or sites; 2) rules that *delete* actors or undergoers; 3) rules that *alter* the grammatical arrangement of roles; 4) rules that *embed*; and 5) rules that *shift* from one discourse category to another, i.e. from state to event or vice versa.

A. Non-contrastive Rules

1. Non-contrastive Undergoer Deletion (nUd)

The undergoer in Kham may be optionally deleted in a small sub-class of Attributive verbs which, among their other uses, may also be used to express weather or natural phenomena. Where the undergoer is optionally deleted from such verbs, the deleted undergoer is understood as an appropriate natural condition or phenomena. Undergoers such as 'weather' in 'the weather is cold' are never expressed in Kham. The verb in such cases is marked (by Ø) for agreement with a 3rd person singular undergoer which cannot be made explicit (referred to henceforth as a dummy undergoer). Consider the following examples:

A (weather) zyuhn.zya
The weather is cold.

nUd C zyuhn.zya
It's cold.

A (time) kubila lizya
The time is late.

nUd C kubila lizya
It's late.

2. Undergoer Replacement (Ur)

Within a particular sub-class of Attributive verbs (which in some cases overlaps with the sub-class discussed in the rule above), the undergoer may be replaced by a locative site. The discourse condition which chooses a site in favor of an undergoer is that the undergoer is either unknown or too vague to be expressed. When one says 'it's scary here' he is no doubt referring to the total situation of being alone, hearing strange noises, etc. There are too many unknown factors involved to be able to say explicitly that such-and-such is scary. Therefore the speaker chooses to say that it is the total situation existing *here* that is scary.

Note that the choice of a site in favor of an undergoer is not merely a simple choice of a locative construction versus a sememically similar nominal construction. That is, it cannot be said that 'it's warm in this house' is an optional way of saying 'this house is warm' (both of which are possible in Kham). The former construction is an expression of *conditions* in the house at the present moment, whereas the latter expresses an inherent *attribute* of the house.

Examples.

A (something in here) ngxrzya
Something in here stinks.

Ur SA alx ngxrzya
It stinks in here.

A (conditions in here) cumzya
Conditions in here are dark.

Ur SA alx cumzya
It's dark in here.

A (the situation over there) cyaszya
The situation over there is scary.

Ur SA nxkx cyaszya
It's scary over there.

Note that the Ur rule has reflections in the transitive set as well, as illustrated in the following example:

T noe ngalay cyu:nakeo
He looked at me.

Ur ST noe bxhjxlalx cyu:keo
He looked in the window.

There are certain Attributive verbs in this sub-class which are restricted to an undergoer like *po:* 'place' or a place name. For example, only places can be *sxyn. swin.o* 'lonely,' *swihn. maswihn.o* 'crowded,' *san. san.o* 'shady,' *phxyn. phxyn.o* 'breezy,' *jyor jyoro* 'level,' *sil silo* 'sickeningly high,' etc. Where *po:*

'place' is used as an undergoer of such verbs, then a quality or attribute of the place is being described. More commonly, however, such verbs are used with a locative site, thus describing the conditions of a particular place: e.g. 'it's lonely here' or 'it's breezy here.'

B. Contrastive Rules

1. Addition Rules

1a. Activizer (Ac) E to aE

Rule: a) Add the verbal prefix sx-.
b) Add to the verb the 3rd person singular actor-marker affix -o.

Structural change:

Where the verbal affix sx- applies to E clauses (derived by nUd), the undergoer remains a dummy and the actor (marked only in the verb) is also a dummy; that is, it cannot be made explicit. The sense of the clause moves from a receptive sense, in which the subject is acted upon, to an active sense in which the subject acts (although the subject cannot be made explicit). Consider the following examples:

	E	zyuhn.-ke stem-pst	It became cold.
Ac	aE	sx-zyun.-ke-o Ac-stem-pst-3sA	It made it cold.
	E	mwin.-ke stem-pst	It became hot.
Ac	aE	sx-mwin-ke-o Ac-stem-pst-3sA	It made it hot.

The derived type, active Eventive (aE), is Eventive by virtue of the fact that no undergoer, actor, or site can be made explicit. It is active by virtue of the fact that a dummy actor is entailed and marked in the verb by the affix -o.

1b. Transitivizer (Tv) R, BR to T, BT

Rule: a) Add the verbal prefix sx-.
b) Add an agent-marked actor to the clause.
c) Add to the verb the appropriate inflectional affixes for transitive verbs.

Structural change:

The verbal affix sx-, when applied to R or BR clauses, marks the addition of an explicit actor. This actor becomes the grammatical subject of the clause, and the original subject (the undergoer) becomes the object of the clause. Consider the following examples:

R ri:h boh-ke
Sub stem-pst
The water spilled.

Tv T nga: ri:h nga-sx-bo-ke
Sub O 1sA-Tv-stem-pst
I spilled the water.

BR ri:h ja:-lx byal-ke
Sub Ref stem-pst
Water filled in the pot.

Tv BT no-e ri:h ja:-lx sx-byal-ke-o
Sub O Ref Tv-stem-pst-3sA
He filled water in the pot. (Eng. - 'he filled the pot with water.')

1c. Undergoer addition (Ua) I, ST to T, BT

Rule: a) Add the verbal prefix sx-.
b) Add an agent marker to the present actor in cases of 3rd person actors.
c) Add an undergoer and its appropriate person-number affix in the verb.

Structural change:

The verbal affix sx-, when applied to I or ST clauses, marks the addition of an undergoer. The original actor-subject correlate remains unchanged. Consider the following examples:

I ram so-ke
Act stem-pst
Ram got up.

Ua T ram-e nga-lay sx-soy-na-ke-o
Act Und Ua-stem-1sU-pst-3sA
Ram got me up.

ST ram sin.-tx guhm-ke
Act Sit stem-pst
Ram climbed in a tree.

Ua BT ram-e nga-lay sin.-tx sx-gum-na-ke-o
Act Und Sit Ua-stem-1sU-pst-3sA
Ram climbed (pushed) me in a tree.

2. Deletion Rules

The verbal affix -*si* is a role deletion marker. -*si* may mark the deletion of an *actor* or an undergoer. A double -*si* (-si-si) marks the deletion of *both* actor and undergoer. *First* we shall limit our discussion *to* rules marked by a single -*si*.

2a. Deletion rules marked by single -*si*

Reflexive intransitivizer (*Itv*) *T*, *BT* *to* *I*, *ST*.

Rule: a) Where the actor and undergoer are referentially identical, delete the undergoer and mark the deletion in the verb by the affix -*si*.
b) Delete the agent marker on the *actor* and assign the appropriate intransitive inflections to the verb.

Structural change:

In Kham, an undergoer which is referentially identical to the actor (such as *self*) is a non-lexical item: it is expressible only as a *deletion* marked in the verb. Thus where referential identity *does* exist between actor and undergoer, the Itv rule is obligatory. The result is an I or ST variant clause with a reflexive meaning. Consider the following examples:

T zya:h-e (self) sxyh-ke-o
Act Und stem-pst-3sA
The witch killed (herself).

Itv I zya:h sxyh-si-ke
Act stem-Itv-pst
The witch killed herself.

BT syal-e (self) dodora:-lx lwi:h-ke-o
Act Und Sit stem-pst-3sA
The fox shoved (himself) into a hollow log.

Itv ST syal dodora:-lx lwi:h-si-ke
Act Sit stem-Itv-pst
The fox burrowed into a hollow log.

Receptive *undergoer* *deletion* (*RUd*) *R*, *BR* *to* *E*, *SR*.

Rule: a) Delete the undergoer and mark the deletion in the verb by the affix -*si*.

b) Delete all undergoer person-number markers from the verb.

Condition:

The underlying clause must have a 1st person undergoer.

Structural change:

Where undergoer deletion is applied to R-set clauses, the subject slot (which was filled by the undergoer in the underlying clause) becomes a dummy. That is, it cannot be made explicit. In all such cases a 1st person undergoer is entailed. Consider the following examples:

BR ge: zihm-lx ge-byal-ke
Und Sit 1pU-stem-pst
We became full in the house. (Eng. 'We filled the house.')

RUd SR zihm-lx byal-si-ke
Sit stem-RUd-pst
ØSub Ref P
(We) became full in the house.

R nga: nga-gyo:h-ke
Und 1sU-stem-pst
I became important.

RUd E gyo:h-si-ke
stem-RUd-pst
ØSub P
(I) became important.

Active receptivizer (aR) I, ST, T, BT to aE, aSR, aR, aBR.

Rule: a) Delete the actor and mark the deletion in the verb by the affix -si.
b) Delete all actor person-number markers from the verb.

Condition:

The underlying clause must have a 1st person actor.

Structural change:

The actor is deleted. The original undergoer does not become the subject of the variant clause but is still an object. The subject slot remains in the construction but only as a dummy which cannot be made explicit. A 1st person actor is entailed. In terms of nuclear roles, these clauses belong to the receptive set, but by virtue of the fact that an actor is entailed and the undergoer is not subject (it retains its goal marking), the clauses are *active* in force. Thus the term *active receptive*. (For further support of this interpretation, see *De-activizer* rule, IV. B.3b.)

Examples.

	T	nga:	zya:h-lay	nga-sxyh-ke
		Act	Und	1sA-stem-pst
		I killed the witch.		
aR	aR		zya:h-lay	sxyh-si-ke
			Und	stem-aR-pst
		ØSub	O	P
		(I) killed the witch.		
	ST	nga:	ao zihm-lx	nga-li-ke
		Act	Sit	1sA-stem-pst
		I stayed in this house.		
aR	aSR		ao zihm-lx	li-si-ke
			Sit	stem-aR-pst
		ØSub	Ref	P
		(I) stayed in this house.		

Note that where the goal marker *-lay* is absent from the input clause, the application of aR gives rise to potential ambiguity. (For a discussion of the conditions under which *-lay* is absent, see Appendix B.) For example, the derived clause *zya:h sxyh-si-ke* could have been derived from either of the following two clauses (the first by Itv and the second by aR):

1. zya:h-e (self) sxyh-ke-o
   The witch killed herself.

2. nga: zya:h nga-sxyh-ke
   I killed the witch.

Where *-lay* is present in the input clause, however, it is present also in the derived clause (zya:h-lay sxyh-si-ke). The *-lay* marked item is clearly an undergoer. Thus the meaning of the variant clause is clearly '(I) killed the witch.'

Receptivizer (R) T, BT to R, BR. A particular sub-class of Transitive and BiTransitive verbs, when undergoing actor deletion, do not entail a 1st person actor. The undergoer becomes the subject of the variant clause, and thus the shift is directly to the receptive set.

Rule:
- a) Delete the actor and its verbal marker, and mark the deletion in the verb by the affix *-si*.
- b) Delete the goal marker where present.
- c) Add the appropriate undergoer person-number marker to the verb.

Structural change:

The actor is deleted and the undergoer moves directly into the subject slot, thus creating a receptive-set clause. Consider the following examples:

BT no-e u-gur sin.-tx turi:-ke-o
Act Und Sit stem-pst-3sA
He scraped his load against a tree.

R BR u-gur sin.-tx turi:-si-ke
Und Sit stem-R-pst
Sub Ref P
His load scraped against a tree.

T gahm-e syalo kurup-ke-o
Act Und stem-pst-3sA
The sun shriveled the leather.

R R syalo kurup-si-ke
Und stem-R-pst
Sub P
The leather shriveled up.

2b. Deletion rules marked by double -si (-si-si)

Active receptive undergoer deletion (aRUd). aR, aBR to aE, aSR

This rule applies only to aR and aBR clauses. That is, it applies only to T and BT clauses to which the aR rule has already applied. (Note that a slight variation of this rule may apply directly to T and BT clauses. See Generic Pronominalization in section 2c. following this section.)

Rule: a) Delete the undergoer and mark the deletion in the verb by the affix -si.
b) Delete all person-number affixes from the verb.

Condition:

The aRUd rule applies only in a specialized context in which the Und is a generic pronoun and has already been introduced as such earlier in the context (see Generic Pronominalization). That is, contrastive Und deletion in T and BT clauses (marked by -si) does not occur where the Und is recoverable from context as a specific lexical item. Where it is recoverable as a specific lexical item, the Und is deleted by non-contrastive deletion (treated in Focus section).

A second condition is that the rule is restricted to the event tenses. Where the underlying clause is in the state tense

-e, a different rule applies. (See /gP/ rule in following section (2c.)

Structural change: The Und is deleted with the result that the derived variant has neither actor nor undergoer--E or SR. The clause remains active with an entailed 1st person actor.

Examples.

aBR	(something)	a-lx	ja:h-si-ke
	Und	Sit	stem-aR-pst
	(I) put something in here.		
aRUd aSR		a-lx	ja:h-si-si-ke
		Sit	stem-aR-aRUd-pst
	(I) put (something) in here.		

The above clause occurs in a context like alx maja:hsisie sa 'I don't think (one) can put (things) in here.' The answer is alx ja:hsisike '(I) put (something) in it.' (Another rendering is, 'It can be put into [I did it].')

In summary, deletion rules marked by -si must be applied in the following order:

1) Itv. Obligatory undergoer deletion where the Und is referentially identical with the actor. Where there is no referential identity this rule can not apply.

2) aR/RUd. Optional 1st person subject deletion.
   a) Und of R and BR clauses.
   b) Act of T-set clauses. May also apply to clauses where
      1) has already applied.

3) aRUd. Undergoer deletion in T and BT clauses where 2) has already applied. Occurs in a specialized context in which the Und is a generic pronoun.

Thus, the second -si in -si-si may come from the application of rule 2 after rule 1 has already applied, or from the application of rule 3 after the application of rule 2. Without reference to the context, then, a form like alx mohn.sisike is ambiguous as to whether it means '(I) hid (myself) in here' or '(I) hid (something) in here.'

2c. Special use of the affix -si

Generic pronominalization (gP) aE, aSR, aR, aBR to C, SA, A, BA.

In Kham, generic pronouns such as 'one' or 'things' (as in 'One cannot put things in here') are non-lexical items. That is, they are expressible only as deletions registered in the verb. The deletion rules are the same as those discussed under aR, RUd, and aRUd with the exception that here the tense of the underlying clause is restricted to the habitual tense -e (with or without the potential modal -du).Where event tenses are used, subject deletion results in a 1st person entailment (see aR and RUd rules). Where the state tense -e is used, however, the entailment is a generic pronoun.

Note that the generic pronouns no-one and nothing can be expressed as lexical items and therefore do not require -si deletions.

Rule: a) Where the Act and/or Und are generic pronouns, delete them using aR, RUd, or aRUd (whichever is appropriate).

b) Where the Act is sue zx 'no-one' and the Und is a generic, the Und may be deleted without the former application of aR.

Examples.

1)		BS	(generic)	(generic)	a-lx	ja:h-o
	aR	BA		(generic)	a-lx	ja:h-si-e
	aRUd	SA			a-lx	ja:h-si-si-e
					here-in	one-puts-things

(One) puts (things) in here. (or 'This is to be poured into')

2)		BS	(generic)	a-lx	ri:h	ja:h-o
	aR	BA		a-lx	ri:h	ja:h-si-e
				here-in	water	one-puts-it

(One) puts water in here. (or 'This is to pour water into')

3)		A	(generic)	gyo:h-e
	RUd	C		gyo:h-si-e
				one-becomes-great

(One) becomes great.

The above clause is often used in a context like: eskul-lx pxri-kin gyo:h-si-e 'If (one) studies in school, (one) becomes great.'

4)		S	(generic)	(self)	hur-du-o
	Itv	D	(generic)		hur-si-du-e
	aR	C			hur-si-si-du-e
					one-can-bathe-self

(One) can bathe (himself).

The above clause is used in a context like: Someone says, ao ri:h tu:zya ma-hur-si-si-du-e 'This water is cold; (one) cannot bathe (himself).' Someone tries it and replies, hur-si-si-du-e '(One) can bathe (himself).'

3. Altering Rules

Altering rules alter the relationship between roles and the surface grammatical categories into which they fall. That is, a skewing occurs in the normal relationship between boxes 1 and 4.

3a. Passive (Pv) ST, T, BT to pST, pT, pBT

Rule: a) Switch the order of Act, Und-(Sit) to Und-(Sit), Act.
b) Shift the box 1 grammatical subject from actor to undergoer and register the shift in the verb by changing the verb from active to passive verb form (see III.C.1).

Structural change:

The Box 1 subject shifts from actor to undergoer, or to site in cases of animate goal-marked sites. In both cases, the actor is then focused upon as new information. (See II.A.3, The Focus Marker System in Kham.) Consider the following examples:

	BT	ram-e	ri:h	ja:-lx	ja:h-ke-o
		Act	Und	Sit	stem-pst-3sA
		Sub	O	Ref	P
		Ram put water in the jug.			
Pv	pBT	ri:h	ja:-lx	ram-e	o-ja:h-o
		Und	Sit	Act	3sA-stem-p
		Sub	Ref	A	P
		Water was put in the jug by Ram.			
	ST	ram	nx-kx	ba-ke	
		Act	Sit	stem-pst	
		Sub	Ref	P	
		Ram went over there.			
Pv	pST	nx-kx	ram	o-ba-o	
		Sit	Act	3sA-stem-p	
		Ref	A	P	
		Over there was gone to by Ram.			

3b. De-activizer (dAc) aSR, aR, aBR to SR, R, BR

The de-activizer rule is also a passive rule, but it applies specifically to those transitive-set clauses which have undergone actor deletion and still remain active. (See Active Receptivizer rule.)

Rule: Change the form of the verb from active to passive.

Structural change:

The undergoer shifts in surface arrangement from an object to a subject. Thus, the original subject slot which could not be made explicit but entailed a 1st person actor is now filled with the undergoer and the 1st person entailment is erased. The result is a receptive-set clause. Consider the following examples:

aR ao ka:h sxyh-si-ke
Und stem-aR-pst
ØSub O P
(I) killed this dog.

dAc R ao ka:h sxyh-si-o
Und stem-aR-dAc
Sub P
This dog was killed (it didn't just die).

aSR a-lx li-si-ke
Sit stem-aR-pst
ØSub Ref P
(I) lived in here.

dAc SR a-lx li-si-o
Sit stem-aR-dAc
Ref P
In here was lived (This was lived in).

4. Embedding Rules

Some modals are viewed as main verbs to which clauses are embedded. In such cases, the modal verb imposes its own case frame upon the embedded clause, thus forcing a re-interpretation of some of its roles. Embedding is basically of three types: 1) double function embedding, 1st degree; 2) double function embedding, 2nd degree; and 3) simple embedding.

4a. Double function embedding, 1st degree

Where the actor of the embedded clause is assigned a new role (reinterpreted) in terms of the modal verb, the actor is said to be in double function. That is, it functions simultaneously in two roles, one in relation to the modal verb, another in relation to the verb of the embedded clause. Where the actor functions in two different roles, one for each verb (say, actor in respect to one verb and site in respect to another verb) we shall refer to the double function as 1st degree.

Where double function occurs, the rest of the embedded clause including its verb (henceforth greater predicate--GP) is also assigned a role in terms of the modal verb. Thus the entire embedded clause is reinterpreted in two parts, the actor (or main constituent) first and the GP second.

The assignment of roles to these two constituents is not arbitrary, but follows a certain ranking of roles for nuclearity (see footnote 7). The embedded actor is assigned the role which has the highest nuclearity (in terms of the modal verb) and the GP is assigned the next highest ranking role. Ranking of nuclearity is as follows: 1) goal site, 2) undergoer, and 3) locative site. Thus where the modal verb is normally a BiTransitive verb with a goal site, the role goal site will be assigned to the actor of the embedded clause, and the role undergoer will be assigned to the GP of the embedded clause. Likewise, where the modal verb is normally a BiTransitive verb with a locative site, the role undergoer (highest ranking) will be assigned to the actor of the embedded clause and the role locative site will be assigned to its GP. All examples of embedding with 1st degree double function encountered thus far have been with BiTransitive modal verbs. Figure 38 illustrates the assignment of roles to constituents in an embedded clause where the actor is in 1st degree double function.

	Roles of Modal Verb				
	Act	Gol	Und	Loc	Verb
		Embedded Clause			
Permissive		Act	GP		BT(Gol)
Ingressive			Act	GP	BT(Loc)
Causative			Act	GP	BT(Loc)

Figure 38. The assignment of roles in sample clauses with 1st degree double function.

Permissive (Pm) I, ST, T, BT to BT.

Rule: a) Change the verb of the clause to be embedded to non-finite form plus the affix -o.
b) Add the finite permissive verb yā-nya 'to give.'

Structural change:

The actor of the original clause is now in double function. That is, it functions both as actor of the embedded clause and as the site of the main clause. With the actor reinterpreted as a goal-marked site, the rest of the embedded clause (the GP) is assigned the role of an undergoer. Consider the following examples:

I no: syan.-ke
Act P
He went to sleep.

Pm BT nga: no:-lay syan.-o nga-e-ke
Act Sit Und Pm P
I let him sleep (I gave sleeping to him).

BT nga: nga-kwa be:h-lx nga-chwi:-ke
Act Und Sit P
I stuffed my clothes in a basket.

Pm BT no-e nga-lay nga-kwa be:h-lx chwi:-o ya-n.-ke-o
Act Sit (Und) Pm P
He let me stuff my clothes in a basket.

Ingressive causative (IgK) I, ST, T, BT to BT.

Rule: a) Change the verb of the clause to be embedded to infinitive form -nya plus the locative affix -tx 'on.'
b) Add the finite ingressive causative verb thu:-nya.

Structural change:

The actor of the original clause is now in double function. It functions both as actor of the embedded clause and as the undergoer of the main clause. With the actor reinterpreted as an undergoer in a BiTransitive clause, the rest of the embedded clause is interpreted as a locative site. Consider the following examples:

T ram-e zihm jxy-ke-o
Act Und P
Ram built a house.

IgK BT no-e ram-lay zihm jxy-nya-tx thu:-ke-o
Act Und (Sit) IgK P
He got Ram started in building a house.

Causative (Cv) I, ST, T, BT to BT.

Rule: a) Change the verb of the clause to be embedded to non-finite form plus the affix -o.
b) Add the causative verb pxrin.-nyā (lit. 'to send').

Structural change:

The actor of the original clause is now in double function. It functions both as actor of the embedded clause and as the undergoer of the main clause. With the actor reinterpreted as an undergoer in a BiTransitive clause with a normal locative site, the rest of the embedded clause is interpreted as the locative site of the main verb. Consider the following examples:

I
ram gxhr-ke
Act P
Ram cried.

Cv BT
no-e ram-lay gxhr-o pxrin.-ke-o
Act Und Sit Cv P
He caused Ram to cry.

BT
ram-e o-kwa be:h-lx chwi:-ke-o
Act Und Sit P
Ram stuffed his clothes in a basket.

Cv BT
no-e ram-lay o-kwa be:h-lx chwi:-o pxrin.-ke-o
Act Und (Sit) Cv P
He made Ram stuff his clothes in a basket.

4b. Double function embedding, 2nd degree

Where the main constituent (Act in T-set, Und in A- or R-set) of the embedded clause functions simultaneously in the same role in respect to both the embedded verb and the main verb, that constituent is said to be in 2nd degree double function. In 2nd degree double function embedding, as well as 1st degree, the GP (as a single constituent) is reinterpreted in terms of the modal verb. The highest ranking role which is assigned to the GP is undergoer. There are a great number of modal-like verbs in Kham which are involved in 2nd degree double function embedding. The following figure illustrates the assignment of roles to constituents in embedded clauses where the main constituent (Act in T-set, Und in A- or R-set) is in 2nd degree double function.

	Roles of Modal Verb					
	Act	Gol	Und	Loc	Cpl	Verb
	Embedded Clause					
Benefactive	Act	new	GP			BT(Gol)
Desire	Act		GP			S
Purpose	Act			GP		ST
Enjoyment	Act				GP	D
Attr. Cv.	new		Und		GP	T
Attr. Emb.			Und		GP	A or R

Figure 39. The assignment of roles in sample clauses with 2nd degree double function.

Benefactive (Bf) T, BT to BT.

Rule: a) Change the original verb to non-finite form plus the affix -dx.
b) Add the finite benefactive verb ya-nya 'to give.'

Structural change:

The actor of the embedded clause is also the actor of the main clause--thus, in 2nd degree double function. The GP is reinterpreted as the undergoer of the main clause. In addition, a Gol Sit is added to the clause by the benefactive verb.

The benefactive rule is the only rule in 2nd degree double function which makes use of a BT verb. Thus the rule adds a role to the original clause. Furthermore, unlike other embedding rules, the benefactive rule is normally restricted to T and BT clauses. For these two reasons, the benefactive rule has been included in Figure 42 as separate from the other embedding rules.

Both the permissive rule and the benefactive rule use the modal verb ya-nya 'to give.' The suffix on the verb stem of the embedded clause, however, makes the two rules distinguishable. In the following example note the differences between 1st degree and 2nd degree double function, using the same modal verb.

```
Permissive     'He allowed me to make a basket'
     no-e  nga-lay  be:h  jxy-o   ya-n.-ke-o
     Act   Sit      (   Und   )   Pm P
           ( original clause )
           Act      Und   P
           1st d.   (   GP    )
     he    to-me    basket make   he-gave-to me

Benefactive    'He made a basket for me'

     no-e  nga-lay  be:h    jxy-dx   ya-n.-ke-o
     Act   Sit      (     Und    )   Bf P
     (Ori-)---------(ginal clause)
     Act            Und     P
     2nd d.         (     GP     )
     he    for-me   basket making    he-gave-to me
```

Attributive embedding (Att). Attributive embedding applies only to attributive-set clauses. The verb of the attributive clause is changed to an adjectival construction by making it non-finite and adding the affix -o. The main constituent (the Und) is then in 2nd degree double function and can function as the undergoer in a specialized sub-set of Attributive, Receptive, Stative, and Transitive verbs. Where embedding is to another Attributive verb, of course, no shift in transitivity has taken place. Where embedding is to a Receptive verb, the shift is from state to event and will be treated under *5. Shifting Rules*. Where the undergoer of the embedded attributive clause functions as the undergoer of a Stative or Transitive verb, an actor addition takes place and will be treated immediately following under *Attributive causative*. Here we illustrate only those cases in which the construction remains attributive.

A ao kwa ruhn.-zya
Und stem-state
This cloth is thick.

Att A ao kwa ruhn.-o li-zya
Und Att stem-state
This cloth is thick.

Att A ao kwa ruhn.-o rxyhn.-zya
Und Att stem-state
This cloth appears to be thick.

Att A ao kwa ruhn.-o darsi-zya
Und Att stem-state
This cloth feels thick.

Attributive causative (*ACv*).

Rule 1 *C* to *aE*.

Rule: a) Change the C verb to non-finite form plus the affix -*o*.
b) Add the Transitive verb *jxy-nya* 'to make'.

Structural change:

This rule applies only to those Attributive verbs which have already undergone non-contrastive undergoer deletion. In such cases, the undergoer is a dummy (cannot be made explicit). Where the GP (the verb) of such a clause is embedded as a complement to the Transitive verb *jxy-nya*, the added actor is also a dummy. Thus the construction consists of an entailed actor (marked in the verb), an entailed undergoer (in 2nd degree double function), and a Transitive predicate--the constituents of an active Eventive clause. Consider the following examples:

C zyuhn.-zya
stem-state
It's cold.

ACv aE zyuhn.-o jxy-ke-o
Att stem-Evt-3sA
It made it cold.

Rule 2 *A* to *T*.

Rule: a) Change the Attributive verb to non-finite form plus

the affix -o.
b) Add the Transitive verb jxy-nya 'to make.'
c) Add an agent-marked actor.

Structural change:

The Attributive verb (the GP) is embedded as the complement of the added Transitive verb. The undergoer of the embedded A clause is now in 2nd degree double function. That is, it functions as the undergoer of both the embedded clause and the main clause. An actor is also added by the Transitive verb. Consider the following examples:

A nxhm khyo:-zya
Und stem-state
The tumpline is long.

ACv T no-e nxhm khyo:-o jxy-ke-o
Act Und Att stem-Evt-3sA
He caused the tumpline to be long.

(Note in the following example that the embedding can also be to a Stative verb--in this case rxn-nya 'to see.')

ACv S nga: nxhm khyo:-o nga-rxn.-zya
Sta Und Att 1sA-stem-state
I see the tumpline to be long. (Eng. 'The tumpline looks long to me.')

Enjoyment modal (Em) I, ST, T, BT to D.

Rule: a) Reduce the verb of the clause to be embedded to a non-finite stem and reduplicate it.
b) Add the Descriptive verb ngxmsi-nya 'to enjoy.'

Structural change:

The actor of the embedded clause is also the actor (statant) of the main clause. That is, it is in 2nd degree double function. The GP of the modified clause is embedded as the complement of the new Descriptive verb. Consider the following examples:

ST nga: bukhi-da nga-ba-ke
Act Sit 1sA-stem-Evt
I went to high pasture.

Em D nga: bukhi-da ba ba nga-ngxmsi-zya
Sta (Cpl) 1sA-stem-state
I enjoy going to high pasture.

T nga: syakxri nga-kxy-ke
Act Und 1sA-stem-Evt
I ate meat.

Em D nga: syakxri kxy kxy nga-ngxmsi-zya
Sta (Cpl) 1sA-stem-state
I enjoy eating meat.

Desire modal (Dm) I, ST, T, BT to S.

Rule: a) Change the verb of the clause to be embedded to non-finite form plus the affix -o.
b) Add the Stative verb pxyn.-nya 'to want!'

Structural change:

The actor of the original clause is also the actor (statant) of the main clause. That is, it is in 2nd degree double function. The GP of the embedded clause is now reinterpreted as the undergoer of the new Stative verb. Consider the following examples:

I ram syah-ke
Act stem-Evt
Ram danced.

Dm S ram-e syah-o pxyn.-zya-o
Act Und stem-state-3sA
Ram wants to dance.

BT ram-e o-kwa be:h-lx chwi:-ke-o
Act Und Sit stem-Evt-3sA
Ram stuffed his clothes in a basket.

Dm S ram-e o-kwa be:h-lx chwi:-o pxyn.-zya-o
Act (Und) stem-state-3sA
Ram wants to stuff his clothes in a basket.

Purpose modal (Prp) I, ST, T, BT to ST.

Rule: Insert the verbal affix -na 'go' or -hu 'come' immediately following the stem of the verb to be embedded.

Structural change:

The actor of the embedded clause is also the actor of the main clause. The greater predicate (GP) of the embedded clause is reinterpreted as the locative site of the main verb. The affixes -na and -hu are viewed as main verbs in this analysis.[12] Consider the following examples:

I ram gxhr-ke
Act stem-Evt
Ram cried.

Prp ST ram gxhr-na-ke
Umk stem-Prp-pst
Act Sit P
Ram went off to cry.

T ram-e sin. pxl-ke-o
Act Und stem-Evt-3sA
Ram cut wood.

Prp ST ram-e sin. pxl-na-ke-o
Agt Umk stem-Prp-pst-3sA
Act (-Sit--) P
Ram went to cut wood.

BT ram-e o-kwa be:h-lx chwi:-ke-o
Act Und Sit stem-Evt-3sA
Ram stuffed his clothes in a basket.

Prp ST ram-e o-kwa be:h-lx chwi:-hu-ke-o
Agt Umk Loc stem-Prp-pst-3sA
Act (-----Sit---------) P
Ram came to stuff his clothes in a basket.

4c. Simple embedding

Where simple embedding occurs, the clause as a whole is embedded to the modal verb. In double function embedding the original clause was embedded in two parts, the main constituent first and the GP second, with the result that the main constituent was in double function. Here the embedding is simple.

Obligation modal (Obl) I, ST, T, BT to R.

Rule: a) Change the verb of the clause to be embedded to non-finite form plus the affix -o.
b) Add the Receptive verb ta-ke 'become.'

Structural change:

The entire clause including the actor is embedded as the undergoer of the Receptive verb. Consider the following examples:

ST nga: zihm-da nga-ba-e
Act Sit 1sA-stem-hab
I go to the house.

Obl R nga: zihm-da ba-o ta-ke
Umk Loc Cpl stem-pst
(Und) P
I must go to the house.

T
no-e be:h jxy-o
Act Und stem-hab
He makes baskets.

Obl R
no-e be:h jxy-o ta-ke
Agt Umk Cpl stem-pst
(Und) P
He must make a basket.

5. Shifting Rules

5a. Eventivization (Ev) C, SA, A, BA to E, SR, R, BR and
D, S to I, T

Rule 1: Replace the stative tense marker -zya with the eventive tense marker -ke.

Structural change:

The sense of the verb shifts from that of an unchanging static state to that of a change of state. Consider the following examples:

A
nga: nga-zyuhn.-zya
Und 1sU-stem-state
I am cold.

Ev R
nga: nga-zyuhn.-ke
Und 1sU-stem-Evt
I became cold.

S
nga: zihm jxy-o nga-pxyn.-zya
Sta (Und) 1sA-stem-state
I want to build a house.

Ev T
nga: zihm jxy-o nga-pxyn.-ke
Act (Und) 1sA-stem-Evt
I came to (the point where I) want to build a house.

Rule 2: a) Add the verbal affix -na (process).
b) Optionally retain the stative tense marker -zya or replace it with the past tense marker -ke.

A
nga: nga-zyuhn.-zya
Und 1sU-stem-state
I am cold.

Ev R
nga: nga-zyuhn.-na-zya
Und 1sU-stem-Ev-pres
I am getting cold.

S nga: zihm jxy-o nga-pxyn.-zya
Sta (Und) 1sA-stem-state
I want to build a house.

Ev T nga: zihm jxy-o nga-pxyn.-na-zya
Act (Und) 1sA-stem-Ev-pres
I am growing in my desire to build a house.

Rule 3: Replace the state verb li-zya 'to be' with the event verb ta-nya 'to become.'

Structural change:

This eventivization rule applies only to those attributive-set clauses which have already undergone attributive embedding. The attributive-set verb which was embedded to an Attributive verb is now embedded to the Receptive verb 'to become.' The result is a shift from state to event. Consider the following examples:

SA nx-zihm-kx zyuhn.-o li-zya
Sit Att stem-state
It is cold at your house.

Ev R nx-zihm-kx zyuhn.-o ta-ke
Sit Att stem-Evt
It became cold at your house.

5b. Stativization (Stv) T-set, R-set to S-set, A-set

Rule 1: Rule 1 applies to all clauses with T or BT verbs, regardless of whether the T or BT verb is inherent or derived.

a) Change the verb to non-finite form and add the affix -dx.
b) Add the auxiliary verb nxy-nya (lit. 'to keep').

Structural change:

The sense of the clause shifts from event to state. Consider the following examples:

BT ram-e o-kwa be:h-lx chwi:-ke-o
Act Und Sit stem-Evt-3sA
Ram stuffed his clothes in a basket.

Stv BS ram-e o-kwa be:h-lx chwi:-dx nxy-o
Sta Und Sit stem state-3sA
Ram has stuffed his clothes in a basket.

T (Originally derived from R by Tv rule)
ram-e ri:h sx-bo-ke-o
Act Und Tv-stem-Evt-3sA
Ram spilled the water.

Stv S ram-e ri:h sx-bo-dx nxy-o
Act Und Tv-stem state-3sA
Ram has spilled the water.

Rule 2: Rule 2 applies to the whole receptive set plus I and ST. That is, it applies to all event clauses except T and BT.

a) Change the verb to non-finite form and add the affix -dx.
b) Add the auxiliary verb le.

Structural change:

The sense of the clause shifts from event to state. Consider the following examples:

I (Derived from T by Itv rule)
ram hur-si-ke
Act stem-Itv-Evt
Ram bathed.

Stv D ram hur-si-dx le
Sta stem-Itv state
Ram has bathed (lit. 'Ram is in the state of having bathed.')

R nga: nga-mxhn.-ke
Und 1sU-stem-Evt
I got drunk.

Stv A nga: mxhn.-dx nga-le
Und stem 1sU-state
I have become drunk (lit. 'I am in the state of having become drunk.')

E (Derived from C by Ev rule)
zyuhn.-ke
stem-Evt
It became cold.

Stv C zyuhn.-dx le
stem state
It has become cold. (lit. 'It is in the state of having become cold.')

5c. Passive stativization (pStv) SR, R, BR to SA, A, BA

Passive stativization applies only to those receptive-set clauses which have previously been derived from the transitive set by aR and dAc rules.

Rule: Add the stative auxiliary li-zya.

Structural change:

The sense of the clause shifts from event to state. Consider the following examples:

R ao ka:h sxyh-si-o
Und stem-aR-Pv
This dog was killed (it didn't just die).

pStv A ao ka:h sxyh-si-o li-zya
Und stem-aR-Pv aux-state
This dog has been killed.

SR ao zihm-lx li-si-o
Sit stem-aR-Pv
This house was lived in.

pStv SA ao zihm-lx li-si-o li-zya
Sit stem-aR-Pv aux-state
This house has been lived in.

C. Possible Derivations

In the full transitivity matrix (defined by the roles of actor, undergoer, and site plus the categories state and event) only ten of sixteen possible clause types occur *inherently* in Kham. This is illustrated in the following figure.

		Und-Sit	Und	Sit	
Event	Act	BT	T	ST	I
		BR	R		
State	Sta		S		D
		BA	A		

Figure 40. Inherent contrastive clause types in Kham.

After applying the derivation rules listed above, however, all sixteen cells of the transitivity matrix are filled. In addition, certain cells must be divided into sub-types, making a total of thirty clause types and sub-types in Kham. Note that in certain sub-types (in Figure 41) the term entailed (role) is used. The entailed role is one which is implied but cannot be made explicit--in other words, a dummy role. Those surface clause types which result from non-contrastive deletion as it is treated in the focus section are not said to have an entailed role, for in such cases the role can be made explicit. Figure 41 illustrates those clause types and sub-types which are added to the transitivity matrix as a result of derivation.

	Und-Sit	Undergoer	Site	
Act	pBT	pT	pST	
Event	aBR entail Act	aR entail Act	SR 1 no entail 2 entail Und aSR 1 entail Act 2 ent Act-Und	E entail Und aE 1 entail Und 2 ent Act-Und
Sta	BS		SS	
State			aSA ent Act-Und SA 1 no entail 2 entail Und	C 1 no entail 2 entail Und aC ent Act-Und

Figure 41. The twenty clause types and sub-types added to the transitivity matrix in Kham as a result of derivation.

Following are examples of the twenty added types referred to in Figure 41:

C 1 hur-si-si-e
It's bathe-able (The water's not too cold).

2 zyuhn.-zya
It's cold (the weather).

aC sx-zyun.-dx nxy-o
It has made it cold.

SA 1 a-lx ja:h-si-si-e
This is put-able into.

2 a-kx cyas-zya
It's scary here (the situation).

aSA ge-le-kx sx-zyun.-dx nxy-o
It has made it cold where we are.

SS ram nx-kx ba-dx le
Ram has gone over there.

BS ram-e ri:h ja:-lx ja:h-dx nxy-o
Ram has put water in the jug.

E gyo:h-si-ke
(I) became important.

aE 1 gxhr-si-ke
(I) cried.

2 sx-zyun.-ke-o
It made it cold.

SR 1 ao zihm-lx li-si-o
This house was lived in.

2 zihm-lx byal-si-ke
(We) filled in the house.

aSR 1 thala-tin zo:-si-ke
(I) jumped from the roof.

2 ge-le-kx sx-zyun.-ke-o
It made it cold where we are.

aR be:h jxy-si-ke
(I) made a basket.

aBR ri:h ja:-lx ja:h-si-ke
(I) put water in the jug.

pST nx-kx ram o-ba-o
That place was gone to by Ram.

pT ao zihm ram-e o-jxy-o
This house was built by Ram.

pBT a-lx ri:h ram-e o-ja:h-o
Water was poured in here by Ram.

1. Summary of Possible Derivations

The derivation rules listed in sections IV.A and B were in most cases illustrated as applying to inherent clause types. The rules, however, apply to derived types as well as inherent ones. Rules may be applied in a series within certain limits. The tree diagram in Figure 42, then, answers the question: to what inherent and derived types does a given rule apply? It is a summary of the set of possible derivational histories of derived variants in Kham.[13] The derivations are restricted so as to allow only one derivational history for each non-ambiguous clause.[14]

The conventions used in the tree diagram are as follows:

[ ]	plug-in point for inherent clause types or for non-terminal nodes indicated by / /
( )	sub-class
/ /	non-terminal node; to be plugged into a node with square brackets containing the same initials. For example, node /T/ is to be plugged into node [T].
*	ungrammatical constructions; the derivation which follows is obligatory.
em	embedding rules
^{38}I	raised numbers refer to numbered examples following Figure 42.
a	active (as in aSR)
p__	a lower case p preceding clause-type initials indicates passive (as in pBT)
__p	a lower case p following clause-type initials indicates permissive (as in BTp)
k	causative (as in BTk)
nUd	non-contrastive undergoer deletion
Ur	undergoer replacement
Att	attributive embedding
Ev 1, 2, 3	eventivization, rules 1, 2, and 3
sx-	the affix sx- which includes activizer, transitivizer, and undergoer addition rules
ACv	attributive causative
Itv	reflexive intransitivizer
Bf	benefactive
Hab	habitual or iterative tense. This is a stativizing rule which can be applied to all event clauses In Figure 42 it has been used only where it is needed to provide the necessary source clauses for generic pronominalization.
Cv	causative rule
Pm	permissive
Obl	obligation modal
Dm	desire modal
aR/gP	active receptivizer. This rule deletes an actor. When applied to sources which have gone through the Hab rule (as in node 25a in Figure 42), the result is generic pronominalization (gP).
R	receptivizer
RUd/aRUD/gP	receptive undergoer deletion, and active receptive undergoer deletion. These rules delete undergoer. When applied to sources which have gone through the Hab rule, the result is generic pronominalization (gP).
Pv	passive rule
dAc	de-activizer
Stv	stativization
pStv	passive stativization

Note that in the tree diagram there are but six plug-in nodes for inherent types, whereas ten inherent types are in existence. The reason for this is that any clause type containing a site exactly parallels its minus-site counterpart in derivational potential (see footnote 7). (One exception is that the inherent BA clause type will not undergo nUd and Ur rules as does the inherent A type.) Thus the starting point, or plug-in point, for an inherent BA clause is the same as that for an A clause (node 1), BR is the same as R (node 32), ST is the same as I (node 001), and BT is the same as T (node 36). The only adjustment necessary is to retain the site throughout the derivation. For example, the derivation for a BR clause would follow the same pattern as R but with a site: thus, 32-BR, 33-BA, 34-SR, 35-SA, 36-BT, 37-BS, 38-ST, 39-SS, etc.

Where embedding rules (em) are encountered, however, the site embeds along with the rest of the greater predicate, and the derived variant in such cases is the same as that illustrated in the diagram. For example, a BT clause would plug in at node 36. At node 59 its type would simply be R, at node 60 it would be S, etc.

(Note that not all embedding rules mentioned in IV.B.4 are included in Figure 42. Only four representative rules have been chosen.)

2. Selected Illustrations of Derivations

The following examples illustrate the derivation potential for each of the ten inherent clause types as illustrated in the derivational tree, Figure 42. For certain nodes in the derivational tree, more than one example is given so as to provide source clauses for later derivations which involve various semantic co-occurrence constraints. An asterisk (*) marks source clauses which are not grammatical constructions in Kham. In such cases, the derivation which follows is obligatory.

2a. Attributive and BiAttributive derivations (illustrated by an inherent Attributive clause)

1. Source clauses for Attributive derivations.

A_1 (weather) mwin.zya*
The weather is warm.

A_2 (the condition in the house) mwin.zya*
The condition in the house is warm.

A_3 bxhres mwin.zya
The bread is warm.

A_4 nga: ngamwin.zya
I am warm.

A_5 no mwin.zya
He is warm.

A_6 oza: mwin.zya
His child is warm.

A_7 zihm gyo:hzya
The house is big.

Clauses 2 through 15 are derived from source clause A_1.

2. C mwin.zya
It's warm.

3. E mwin.ke
It became warm.

4. C mwin.dx le
It has become warm.

5. aE sxmwin.keo
It made it warm.

6. aC sxmwin.dx nxy.o
It has made it warm.

7. E mwin.nazya
It's getting warm.

8. C mwin.nadx le
It has been getting warm.

9. C mwin.o lizya
It's warm.

10. E mwin.o take
It came to be warm.

11. C mwin.o tadx le
It has come to be warm.

12. aE mwin.o jxykeo
It made it to be warm.

13. aC mwin.o jxydx nxy.o
It has made it to be warm.

14. aSR gelay mwin.o jxydx yasike
It made it (to be) warm for us.

15. aSA gelay mwin.o jxydx yadx nxysio
It has made it (to be) warm for us.

Clauses 16 through 23 are derived from source clause A_2.

16. SA zihmkx mwin.zya
It's warm in the house.

17. SR zihmkx mwin.ke
It became warm in the house.

18. SA zihmkx mwin.dx le
It has become warm in the house.

19. SR zihmkx mwin.nazya
It's getting warm in the house.

20. SA zihmkx mwin.nadx le
It has been getting warm in the house.

21. SA zihmkx mwin.o lizya
It's warm in the house.

22. SR zihmkx mwin.o take
It came to be warm in the house.

23. SA zihmkx mwin.o tadx le
It has come to be warm in the house.

Clauses 24 and 25 are derived from source clause A_3.

24. A bxhres mwin.o lizya
The bread is warm.

25. R bxhres mwin.o take
The bread came to be warm.

25a. Source clauses for gP derivation.

A_8 (One) mwin.o tae*
One comes to be warm.

(things) mwin.o tae*
Things come to be warm.

A_9 (one) gyo:h.o tae*
One comes to be big.

(things) gyo:h.o tae*
Things come to be big.

Clause 26 is derived from source clause A_3.

26. A bxhres mwin.o tadx le
The bread has come to be warm.

Clause 27 is derived from source clause A_4.

27. E mwin.o tasike
(I) came to be warm.

Clause 28 is derived from source clause A_8.

28. C mwin.o taśie
(One) comes to be warm.

29. /T/

36. Source clauses for ACv derivations.

T_1 noe oza: mwin.o jxykeo (from A_6)
He made his child (to be) warm.

T_2 nga: (ngalay) mwin.o ngajxyke* (from A_4)
I made (pretended myself) to be warm.

T_3 noe (nolay) mwin.o jxykeo* (from A_5)
He made (pretended himself) to be warm.

T_4 noe zihm gyo:h.o jxykeo (from A_7)
He made the house (to be) big.

T_5 nga: zihm gyo:h.o ngajxyke (from A_7)
I made the house (to be) big.

T_6 nga: (something) gyo:h.o ngajxyke*
I made something (to be) big.

36a. Source clauses for gP derivation.

S_1 (One) (one) mwin.o jxyduo* (from A_8)
One can make (pretend himself) to be warm.

S_2 (One) zihm gyo:h.o jxyduo* (from A_7)
One can make a house (to be) big.

S_3 (one) (things) gyo:h.o jxyduo* (from A_9)
One can make things to be big.

Clause 37 is derived from source clause T_1.

37. S noe oza: mwin.o jxydx nxy.o
He has made his child (to be) warm.

Clause 38 is derived from source clause T_2.

38. I nga: mwin.o ngajxysike
I made (pretended) to be warm.

38a. Source clause for gP derivation.

D_1 (one) mwin.o jxysidue* (from S_1)
One can pretend to be warm.

Clauses 39 and 40 are derived from source clause T_2.

39. D nga: mwin.o jxysidx ngale
I have pretended to be warm.

40. aE mwin.o jxysisike
(I) pretended to be warm.

Clause 41 is derived from source clause D_1.

41. C mwin.o jxysisidue
(One) can pretend to be warm.

42. /em/

51. Source clause for Cv derivations.

BTk_1 nga: nolay mwin.o jxysio ngapxrin.ke (from T_3)
I made him pretend to be warm.

Clauses 52 through 54 are derived from source clause BTK_1.

52. BSk nga: nolay mwin.o jxysio pxrin.dx nganxy.e
I have made him pretend to be warm.

53. R nga: nolay mwin.o jxysio pxrin.o take
I ought to make him pretend to be warm.

54. aBRk nolay mwin.o jxysio pxrin.sike
(I) made him pretend to be warm.

55. Source clause for Pm derivations.

BTp_1 nga: nolay mwin.o jxysio ngaeke (from T_3)
I allowed him to pretend to be warm.

Clauses 56 through 58 are derived from source clause BTp_1.

56. BSp nga: nolay mwin.o jxysio yadx nganxy.e
I have allowed him to pretend to be warm.

57. R (not natural with more than two embeddings)

58. aBRp nolay mwin.o jxysio yasike
(I) allowed him to pretend to be warm.

Clause 59 is derived from source clause T_3.

59. R no mwin.o jxysio take
He ought to pretend to be warm.

60. /S/

01. Source clause for Dm derivations.

S_4 nga: mwin.o jxysio ngapxyn.zya (from T_2)
I want to pretend to be warm.

Clauses 02 through 010 are derived from source S_4.

02. T nga: mwin.o jxysio ngapxyn.ke
I came-to-want to pretend to be warm.

03. S nga: mwin.o jxysio pxyn.dx nganxy.e
I have come-to-want to pretend to be warm.

04. aR mwin.o jxysio pxyn.sike
(I) came-to-want to pretend to be warm.

05.-08. (applies to a sub-set only--see section 2f)

09. T nga: mwin.o jxysio ngapxyn.nazya
I am coming-to-want to pretend to be warm.

010. S nga:mmwin.o jxysio pxyn.nadx nganxy.e
I have been coming-to-want to pretend to be warm.

Clauses 43 through 47 are derived from source T_5.

43. BT nga: nolay zihm gyo:h.o jxydx ngaeke
I made the house big for him.

44. BS nga: nolay zihm gyo:h.o jxydx yadx nganxy.e
I have made the house big for him.

45. R nga: nolay zihm gyo:h.o jxydx eo take
I ought to make the house big for him.

46. S nga: nolay zihm gyo:h.o jxydx eo ngapxyn.zya
I want to make the house big for him.

47. aBR nolay zihm gyo:h.o jxydx yasike
(I) made the house big for him.

Clauses 48 and 49 may be derived from either T_4 or T_5.

48. BR nolay zihm gyo:h.o jxydx yasio
The house was made big for him.

49. BA nolay zihm gyo:h.o jxydx yasio lizya
The house has been made big for him.

Clause 50 is derived from source clause T_5.

50. pBT nolay zihm nga: gyo:h.o jxydx ngaeo
The house was made big for him by me.

51. Source clause for Cv derivations.

BTk_2 nga: nolay zihm gyo:h.o jxy.o ngapxrin.ke (from T_4)
I caused him to make the house big.

Clauses 52 through 54 are derived from source clause BTk_2.

52. BSk nga: nolay zihm gyo:h.o jxy.o pxrin.dx nganxy.e
I have caused him to make the house big.

53. R (not natural with more than two embeddings)

54. aBRk nolay zihm gyo:h.o jxy.o pxrin.sike
(I) caused him to make the house big.

55. Source clause for Pm derivations.

BTp_2 nga: nolay zihm gyo:h.o jxy.o ngaeke (from T_4)
I allowed him to make the house big.

Clauses 56 through 58 are derived from source clause BTp_2.

56. BSp nga: nolay zihm gyo:h.o jxy.o yadx nganxy.e
I have allowed him to make the house big.

57. R (not natural with more than two embeddings)

58. aBRp nolay zihm gyo:h.o jxy.o yasike
(I) allowed him to make the house big.

Clause 59 is derived from source clause T_4.

59. R noe zihm gyo:h.o jxy.o take
He ought to make the house big.

60. /S/

01. Source clause for Dm derivations.

S_5 nga: zihm gyo:h.o jxy.o ngapxyn.zya (from T_5)
I want to make the house big.

Clauses 02 through 010 are derived from source clause S_5.

02. T nga: zihm gyo:h.o jxy.o ngapxyn.ke
I came-to-want to make the house big.

03. S nga: zihm gyo:h.o jxy.o pxyn.dx nganxy.e
I have come-to-want to make the house big.

04. aR zihm gyo:h.o jxy.o pxyn.sike
(I) came-to-want to make the house big.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: zihm gyo:h.o jxy.o ngapxyn.nazva
I am coming-to-want to make the house big.

010. S nga:zihm gyo:h.o jxy.o pxyn.nadx nganxy.e
I have been coming-to-want to make the house big.

Clauses 61 through 63 are derived from source clause T_5.

61. pT ao zihm nga: gyo:h.o ngajxy.o
This house was made big by me.

62. pS ao zihm nga: gyo:h.o jxydx nganxy.o
This house has been made big by me.

63. aR zihm gyo:h.o jxysike
(I) made the house big.

Clause 64 is derived from source clause T_6.

64. aE gyo:h.o jxysisike
(I) made (something) big.

Clauses 65 and 66 may be derived from either T_4 or T_5.

65. R zihm gyo:h.o jxysio
The house was made big.

66. A zihm gyo:h.o jxysio lizya
The house has been made big.

Clause 67 is derived from source clause S_2.

67. A zihm gyo:h.o jxysidue
(One) can make the house big.

Clause 68 is derived from source clause S_3.

68. C gyo:h.o jxysisidue
(One) can make (things) big.

69-71. (Applies to a sub-set of inherent T, BT only--see section 2d)

Clauses 30 through 32 are derived from source clause A_3.

30. R bxhres mwin.nazya
The bread is getting warm.

31. A bxhres mwin.nadx le
The bread has been getting warm.

32. R bxhres mwin.ke
The bread became warm.

32a. Source clauses for gP derivation.

A_{10} (one) mwin.e*
One gets warm.

(things) mwin.e*
Things get warm.

Clause 33 is derived from source clause A_3.

33. A bxhres mwin.dx le
The bread has become warm.

Clause 34 is derived from source clause A_4.

34. E mwin.sike
(I) became warm.

Clause 35 is derived from source A_{10}.

35. C mwin.sie
(One) gets warm.

36. Source clauses for sx- derivations.

T_7 noe bxhres sxmwin.keo (from A_3)
He warmed the bread.

T_8 nga: bxhres ngasxmwin.ke (from A_3)
I warmed the bread.

T_9 nga: (ngalay) ngasxmwin.ke* (from A_4)
I warmed myself.

T_{10} noe (nolay) sxmwin.keo* (from A_5)
He warmed himself.

T_{11} nga: (something) ngasxmwin.ke*
I warmed something.

36a. Source clauses for gP derivation.

S_6 (one)(things) sxmwin.duo* (from A_8)
One can warm things.

S_7 (one)(one) sxmwin.o* (from A_8)
One warms one's self.

S_8 (one) bxhres sxmwin.o* (from A_3)
One warms bread.

Clause 37 is derived from source clause T_7.

37. S noe bxhres sxmwin.dx nxy.o
He has warmed the bread.

Clause 38 is derived from source clause T_9.

38. I nga: ngasxmwin.sike
I warmed (myself).

38a. Source clause for gP derivation.

D_2 (one) sxmwin.sie* (from S_7)
One warms one's self.

Clauses 39 and 40 are derived from source clause T_9.

39. D nga: sxmwin.sidx ngale
I have warmed (myself).

40. aE sxmwin.sisike
(I) warmed (myself).

Clause 41 is derived from source clause D_2.

41. C sxmwin.sisie
(One) warms (himself)--(when it's cold).

42. /em/

51. Source clause for Cv derivations.

BTk_3 nga: nolay sxmwin.sio ngapxrin.ke (from T_{10})
I made him warm (himself).

Clauses 52 through 54 are derived from source clause BTk_3.

52. BSk nga: nolay sxmwin.sio pxrin.dx nganxy.e
I have made him warm (himself).

53. R nga: nolay sxmwin.sio pxrin.o take
I ought to make him warm himself.

54. aBRk nolay sxmwin.sio pxrin.sike
(I) made him warm (himself).

55. Source clause for Pm derivations.

BTp$_3$ nga: nolay sxmwin.sio ngaeke (from T$_{10}$)
I allowed him to warm himself.

Clauses 56 through 58 are derived from source clause BTp$_3$.

56. BSp nga: nolay sxmwin.sio yadx nganxy.e
I have allowed him to warm himself.

57. R nga: nolay sxmwin.sio eo take
I ought to allow him to warm himself.

58. aBRp nolay sxmwin.sio yasike
(I) allowed him to warm himself.

Clause 59 is derived from source clause T$_9$.

59. R nga: sxmwin.sio take
I ought to warm myself.

60. /S/

01. Source clause for Dm derivations.

S$_9$ nga: sxmwin.sio ngapxyn.zya (from T$_9$)
I want to warm myself.

Clauses 02 through 010 are derived from source clause S$_9$.

02. T nga: sxmwin.sio ngapxyn.ke
I came-to-want to warm myself.

03. S nga: sxmwin.sio pxyn.dx nganxy.e
I have come-to-want to warm myself.

04. aR sxmwin.sio pxyn.sike
(I) came-to-want to warm myself.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: sxmwin.sio ngapxyn.nazya
I am coming-to-want to warm myself.

010. S nga: sxmwin.sio pxyn.nadx nganxy.e
I have been coming-to-want to warm myself.

Clauses 43 through 47 are derived from source clause T$_8$.

43. BT nga: nolay bxhres sxmwin.dx ngaeke
I warmed the bread for him.

44. BS nga: nolay bxhres sxmwin.dx yadx nganxy.e
I have warmed the bread for him.

45. R nga: nolay bxhres sxmwin.dx yao take
I ought to warm the bread for him.

46. S nga: nolay bhxres sxmwin.dx yao nganxyn.zya
I want to warm the bread for him.

47. aBR nolay bxhres sxmwin.dx yasike
(I) warmed the bread for him.

Clauses 48 and 49 may be derived from either T_7 or T_8.

48. BR bxhres nolay sxmwin.dx yasio
The bread was warmed for him.

49. BA bxhres nolay sxmwin.dx yasio lizya
The bread has been warmed for him.

Clause 50 is derived from source clause T_8.

50. pBT bxhres nolay nga: sxmwin.dx ngaeo
The bread was warmed for him by me.

51. Source clause for Cv derivations.

BTk_4 nga: nolay bxhres sxmwin.o ngapxrin.ke (from T_7)
I made him warm the bread.

Clauses 52 through 54 are derived from source clause BTk_4.

52. BSk nga: nolay bxhres sxmwin.o pxrin.dx nganxy.e
I have made him warm the bread.

53. R nga: nolay bxhres sxmwin.o pxrin.o take
I ought to make him warm the bread.

54. aBRk nolay bxhres sxmwin.o pxrin.sike
(I) made him warm the bread.

55. Source clause for Pm derivations.

BTp_4 nga: nolay bxhres sxmwin.o ngaeke (from T_7)
I allowed him to warm the bread.

Clauses 56 through 58 are derived from source clause BTp_4.

56. BSp nga: nolay bxhres sxmwin.o yadx nganxy.e
I have allowed him to warm the bread.

57. R nga: nolay bxhres sxmwin.o yao take
I ought to allow him to warm the bread.

58. BRp nolay bxhres sxmwin.o yasike
(I) allowed him to warm the bread.

Clause 59 is derived from source clause T_7.

59. R noe bxhres sxmwin.o take
He ought to warm the bread.

60. /S/

01. Source clause for Dm derivations.

S_{10} nga: bxhres sxmwin.o ngapxyn.zya (from T_8)
I want to warm the bread.

Clauses 02 through 010 are derived from source clause S_{10}

02. T nga: bxhres sxmwin.o ngapxyn.ke
I came-to-want to warm the bread.

03. S nga: bxhres sxmwin.o pxyn.dx nganxy.e
I have come-to-want to warm the bread.

04. aR bxhres sxmwin.o pxyn.sike
(I) came to want to warm the bread.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: bxhres sxmwin.o ngapxyn.nazya
I am coming-to-want to warm the bread.

010. S nga: bxhres sxmwin.o pxyn.nadx nganxy.e
I have been coming-to-want to warm the bread.

Clauses 61 through 63 are derived from source clause T_8.

61. pT bxhres nga: ngasxmwin.o
The bread was warmed by me.

62. pS bxhres nga: sxmwin.dx nganxy.o
The bread has been warmed by me.

63. aR bxhres sxmwin.sike
(I) warmed the bread.

Clause 64 is derived from source clause T_{11}.

64. aE sxmwin.sisike
(I) warmed (something). (I proved it could be done.)

Clauses 65 and 66 may be derived either from T_7 or T_8.

65. R bxhres sxmwin.sio
The bread was warmed.

66. A Lxhres sxmwin.sio lizya
The bread has been warmed.

Clause 67 is derived from source clause S_8.

67. A bxhres sxmwin.si
(One) warms bread. (Bread is something which one warms.)

Clause 68 is derived from source clause S_6.

68. C sxmwin.sisidue
(One) can warm (things)--(when they get cold).

69-71. (Applies to a sub-set of inherent T, BT only--see section 2d).

2b. Receptive and BiReceptive derivations (illustrated by an inherent Receptive clause)

32. Source clauses for Receptive derivations.

R_1 khurja mahke
The knife got lost.

R_2 nga: ngamahke
I got lost.

R_3 no mahke
He got lost.

32a. Source clause for gP derivation.

A_1 (one) mah.e*
One gets lost (from time to time).

(things) mah.e*
Things get lost (from time to time).

Clauses 33 and 34 are derived from source clause R_2.

33. A nga: mahdx ngale
I have become lost.

34. E mahsike
(I) got lost.

Clause 35 is derived from source clause A_1.

35. C mahsie
(Things) get lost (from time to time).

36. Source clauses for sx- derivations.

T_1 noe khurja sxmxykeo (from R_1)
He lost the knife.

T_2 nga: khurja ngasxmxyke (from R_1)
I lost the knife.

T_3 nga: (ngalay) ngasxmxyke* (from R_2)
I lost myself. (I withdrew.)

T_4 noe (nolay) sxmxykeo* (from R_3)
He lost himself. (He withdrew.)

T_5 nga: (something) ngasxmxyke*
I lost something.

36a. Source clauses for gP derivation.

S_1 (one)(one) sxmxyduo* (from A_1)
One can lose (withdraw) oneself.

S_2 (one)(things) sxmxy.o* (from A_1)
One loses things.

S_3 (one) khurja sxmxy.o* (from R_1)
One loses knives.

Clause 37 is derived from source clause T_1.

37. S noe khurja sxmxydx nxy.o
He has lost the knife.

Clause 38 is derived from source clause T_3.

38. I nga: ngasxmxysike
I lost (myself). (I withdrew.)

38a. Source clause for gP derivation.

D_1 (one) sxmxysidue* (from S_1)
One can withdraw.

Clauses 39 and 40 are derived from source clause T_3.

39. D nga: sxmxysidx ngale
I have withdrawn.

40. aE sxmxysisike
(I) withdrew.

Clause 41 is derived from source clause S_1.

41. C sxmxysisidue
(It is possible) to withdraw.
(One) can withdraw (himself).

42. /em/

51. Source clause for Cv derivations.

BTk$_1$ nga: nolay sxmxysio ngapxrin.ke (from T$_4$)
I made him withdraw.

Clauses 52 through 54 are derived from source clause BTk$_1$.

52. BSk nga: nolay sxmxysio pxrin.dx nganxy.e
I have made him withdraw.

53. R nga: nolay sxmxysio pxrin.o take
I ought to make him withdraw.

54. aBRk nolay sxmxysio pxrin.sike
(I) made him withdraw.

55. Source clause for Pm derivations.

BTp$_1$ nga: nolay sxmxysio ngaeke (from T$_4$)
I allowed him to withdraw.

Clauses 56 through 58 are derived from source clause BTp$_1$.

56. BSp nga: nolay sxmxysio yadx nganxy.e
I have allowed him to withdraw.

57. R nga: nolay sxmxysio yao take
I ought to allow him to withdraw.

58. aBRp nolay sxmxysio yasike
(I) allowed him to withdraw.

Clause 59 is derived from source clause T$_4$.

59. R no sxmxysio take
He ought to withdraw.

60. /S/

01. Source clause for Dm derivations.

S$_4$ nga: sxmxysio ngapxyn.zya (from T$_3$)
I want to withdraw.

Clauses 02 through 010 are derived from source clause S$_4$.

02. T nga: sxmxysio ngapxyn.ke
I came-to-want to withdraw.

03. S nga: sxmxysio pxyn.dx nganxy.e
I have come-to-want to withdraw.

04. aR sxmxysio pxyn.sike
(I) came to want to withdraw.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: sxmxysio ngapxyn.nazya
I am coming-to-want to withdraw.

010. S nga: sxmxysio pxyn.nadx nganxy.e
I have been coming-to-want to withdraw.

Clauses 43 through 47 are derived from source clause T_2.

43. BT nga: nolay khurja sxmxydx ngaeke
I lost his knife on him.

Note. 'On him' is used as the English gloss for benefactive of dis-service, on the pattern of 'The engine died on me,' 'He tattled on me,' etc.

44. BS nga: nolay khurja sxmxydx yadx nganxy.e
I have lost his knife on him.

45. R nga: nolay khurja sxmxydx yao take
I ought to lose his knife on him.

46. S nga: nolay khurja sxmxydx yao ngapxyn.zya
I want to lose his knife on him.

47. aBR nolay khurja sxmxydx yasike
(I) lost his knife on him.

Clauses 48 and 49 may be derived either from T_1 or T_2.

48. BR nolay khurja sxmxydx yasio
His knife was lost on him.

49. BA nolay khurja sxmxydx yasio lizya
His knife has been lost on him.

Clause 50 is derived from source clause T_2.

50. pBT nolay khurja nga: sxmxydx ngaeo
It was he who lost his knife on him.

51. Source clause for Cv derivations.

BTk_2 nga: nolay khurja sxmxy.o ngapxrin.ke
I made him lose the knife.

Clauses 52 through 54 are derived from source clause BTk_2.

52. BSk nga: nolay khurja sxmxy.o pxrin.dx nganxy.e
I have made him lose the knife.

53. R nga: nolay khurja sxmxy.o pxrin.o take
I ought to make him lose the knife.

54. aBRk nolay khurja sxmxy.o pxrin.sike
(I) made him lose his knife.

55. Source clause for Pm derivations.

BTp$_2$ nga: nolay khurja sxmxy.o ngaeke (from T_1)
I allowed him to lose the knife.

Clauses 56 through 58 are derived from source clause BTp$_2$.

56. BSp nga: nolay khurja sxmxy.o yadx nganxy.e
I have allowed him to lose the knife.

57. R nga: nolay khurja sxmxy.o yao take
I ought to allow him to lose the knife.

58. aBRp nolay khurja sxmxy.o yasike
(I) allowed him to lose the knife.

Clause 59 is derived from source clause T_1.

59. R noe khurja sxmxy.o take
He ought to lose the knife.

60. /S/

01. Source clause for Dm derivations.

S_5 nga: khurja sxmxy.o ngapxyn.zya (from T_2)
I want to lose the knife.

Clauses 02 through 010 are derived from source clause S_5.

02. T nga: khurja sxmxy.o ngapxyn.ke
I came-to-want to lose the knife.

03. S nga: khurja sxmxy.o pxyn.dx nganxy.e
I have come-to-want to lose the knife.

04. aR khurja sxmxy.o pxyn.sike
(I) came-to-want to lose the knife.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: khurja sxmxy.o ngapxyn.nazya
I am coming-to-want to lose the knife.

010. S nga: khurja sxmxy.o pxyn.nadx nganxy.e
I have been coming-to-want to lose the knife.

Clauses 61 through 63 are derived from source clause T_2.

61. pT khurja nga: ngasxmxy.o
The knife was lost by me.

62. pS khurja nga: sxmxydx nganxy.o
The knife has been lost by me.

63. aR khurja sxmxysike
(I) lost the knife.

Clause 64 is derived from source clause T_5.

64. aE sxmxysisike
(I) lost (something).

Clauses 65 and 66 may be derived either from T_1 or T_2.

65. R khurja sxmxysio
The knife was lost.

66. A khurja sxmxysio lizya
The knife has been lost.

Clause 67 is derived from source clause S_3.

67. A khurja sxmxysie
Knives get lost. or (One) loses knives (from time to time.

Clause 68 is derived from source clause S_2.

68. C sxmxysisie
(One) loses (things)(from time to time).

69-71. (Applies to a sub-set of inherent T, BT only--see section 2d).

2c. Intransitive and SemiTransitive derivations (illustrated by an inherent SemiTransitive clause)

001. Source clauses for SemiTransitive derivations.

ST_1 no sin.tx guhmke
He climbed up a tree.

ST_2 nga: sin.tx ngaguhmke
I climbed up a tree.

001a. Source clause for gP derivation.

SS_1 (one) sin.tx guhmdue*
One can climb up a tree.

36. Source clauses for sx- derivations.

BT$_1$ noe oza: sin.tx sxgumkeo (from ST$_1$)
He climbed (pushed) his child up a tree.

BT$_2$ nga: oza: sin.tx ngasxgumke (from ST$_2$)
I pushed his child up a tree.

BT$_3$ nga: (ngalay) sin.tx ngasxgumke* (from ST$_2$)
I got myself up a tree.

BT$_4$ noe (nolay) sin.tx sxgumkeo* (from ST$_1$)
He got himself up a tree.

BT$_5$ nga: (something) sin.tx ngasxgumke* (from ST$_2$)
I pushed something up a tree.

36a. Source clauses for gP derivation.

BS$_1$ (one)(one) sin.tx sxgumduo* (from SS$_1$)
One can get himself up a tree.

BS$_2$ (one)(things) sin.tx sxgumduo* (from SS$_1$)
One can push things up a tree.

BS$_3$ (one) oza: sin.tx sxgumduo* (from SS$_1$)
One can push his child up a tree.

Clause 37 is derived from source BT$_1$.

37. BS noe oza: sin.tx sxgumdx nxy.o
He has pushed his child up a tree.

Clause 38 is derived from source clause BT$_3$.

38. ST nga: sin.tx ngasxgumsike
I got myself up a tree.

38a. Source clause for gP derivation.

SS$_2$ (one) sin.tx sxgumsidue* (from SS$_1$)
One can get up a tree.

Clauses 39 and 40 are derived from source clause BT$_3$.

39. SS nga: sin.tx sxgumsidx ngale
I have gotten myself up a tree.

40. aSR sin.tx sxgumsisike
(I) got myself up a tree.

Clause 41 is derived from source clause SS$_2$.

41. SA sin.tx sxgumsisidue
(One) can get (oneself) up a tree. or (It's possible)

to get up a tree.

42. /em/

51. Source clause for Cv derivations.

BTk_1 nga: nolay sin.tx sxgumsio ngapxrin.ke (from BT_4)
I made him get himself up a tree.

Clauses 52 through 54 are derived from source clause BTk_1.

52. BSk nga: nolay sin.tx sxgumsio pxrin.dx nganxy.e
I have made him get himself up a tree.

53. R nga: nolay sin.tx sxgumsio pxrin.o take
I ought to make him get himself up a tree.

54. aBRk nolay sin.tx sxgumsio pxrin.sike
(I) made him get himself up a tree.

55. Source clause for Pm derivations.

BTp_1 nga: nolay sin.tx sxgumsio ngaeke (from BT_4)
I allowed him to get himself up a tree.

Clauses 56 through 58 are derived from source clause BTp_1.

56. BSp nga: nolay sin.tx sxgumsio yadx nganxy.e
I have allowed him to get himself up a tree.

57. R nga: nolay sin.tx sxgumsio yao take
I ought to allow him to get himself up a tree.

58. aBRp nolay sin.tx sxgumsio yasike
(I) allowed him to get himself up a tree.

Clause 59 is derived from source clause BT_4.

59. R no sin.tx sxgumsio take
He ought to get himself up a tree.

60. /S/

01. Source clause for Dm derivations.

S_1 nga: sin.tx sxgumsio ngapxyn.zyà (from BT_3)
I want to get myself up a tree.

Clauses 02 through 010 are derived from source clause S_1.

02. T nga: sin.tx sxgumsio ngapxyn.ke
I came-to-want to get myself up a tree.

03. S nga: sin.tx sxgumsio pxyn.dx nganxy.e
I have come-to-want to get myself up a tree.

04. aR sin.tx sxgumsio pxyn.sike
(I) came-to-want to get myself up a tree.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: sin.tx sxgumsic ngapxyn.nazya
I am coming-to-want to get myself up a tree.

010. S nga: sin.tx sxgumsio pxyn.nadx nganxy.e
I have been coming-to-want to get myself up a tree.

Clauses 43 through 47 are derived from source clause BT$_2$.

43. BT nga: nolay oza: sin.tx sxgumdx ngaeke
I pushed his child up the tree for him.

44. BS nga: nolay oza: sin.tx sxgumdx yadx nganxy.e
I have pushed his child up the tree for him.

45. R nga: nolay oza: sin.tx sxgumdx yao take
I ought to push his child up the tree for him.

46. S nga: nolay oza: sin.tx sxgumdx yao ngapxyn.zya
I want to push his child up the tree for him.

47. aBR nolay oza: sin.tx sxgumdx yasike
(I) pushed his child up the tree for him.

Clauses 48 and 49 may be derived either from BT$_1$ or BT$_2$.

48. BR nolay oza: sin.tx sxgumdx yasio
His child was pushed up the tree for him.

49. BA nolay oza: sin.tx sxgumdx yasio lizya
His child has been pushed up the tree for him.

Clause 50 is derived from source clause BT$_2$.

50. pBT nolay oza: nga: sin.tx sxgumdx ngaeo
His child was pushed up the tree for him by me.

51. Source clause for Cv derivations.

BTk$_2$ nga: nolay oza: sin.tx sxgumo ngapxrin.ke (from BT$_1$)
I made him push his child up the tree.

Clauses 52 through 54 are derived from source clause BTk$_2$.

52. BSk nga: nolay oza: sin.tx sxgumo pxrin.dx nganxy.e
I have made him push his child up the tree.

53. R nga: nolay oza: sin.tx sxgumo pxrin.o take
I ought to make him push his child up the tree.

54. aBRk nolay oza: sin.tx sxgumo pxrin.sike
(I) made him push his child up the tree.

55. Source clause for Pm derivations.

BTp_2 nga: nolay oza: sin.tx sxgumo ngaeke (from BT_1)
I allowed him to push his child up the tree.

Clauses 56 through 58 are derived from source clause BTp_2.

56. BSp nga: nolay oza: sin.tx sxgumo yadx nganxy.e
I have allowed him to push his child up the tree.

57. R nga: nolay oza: sin.tx sxgumo yao take
I ought to allow him to push his child up the tree.

58. aBRp nolay oza: sin.tx sxgumo yasike.
(I) allowed him to push his child up the tree.

Clause 59 is derived from source clause BT_1.

59. R nga oza: sin.tx sxgumo take
I ought to push his child up the tree.

60. /S/

01. Source clause for Dm derivations.

S_2 nga: oza: sin.tx sxgumo ngapxyn.zya (from BT_2)
I want to push his child up the tree.

Clauses 02 through 010 are derived from source clause S_2.

02. T nga: oza: sin.tx sxgumo ngapxyn.ke
I came-to-want to push his child up the tree.

03. S nga: oza: sin.tx sxgumo pxyn.dx nganxy.e
I have come-to-want to push his child up the tree.

04. aR oza: sin.tx sxgumo pxyn.sike
(I) came-to-want to push his child up the tree.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: oza: sin.tx sxgumo ngapxyn.nazya
I am coming-to-want to push his child up the tree.

010. S nga: oza: sin.tx sxgumo pxyn.nadx nganxy.e
I have been coming-to-want to push his child up the tree.

Clauses 61 through 63 are derived from source clause BT$_2$.

61. pBT nolay sin.tx nga: ngasxgumo
He was pushed up the tree by me.

62. pBS nolay sin.tx nga: sxgumdx nganxy.o
He has been pushed up the tree by me.

63. aBR nolay sin.tx sxgumsike
(I) pushed him up the tree.

Clause 64 is derived from source clause BT$_5$.

64. aSR sin.tx sxgumsisike
(I) pushed (something) up the tree.

Clauses 65 and 66 may be derived either from BT, or BT$_2$.

65. BR oza: sin.tx sxgumsio
His child was pushed up the tree.

66. BA oza: sin.tx sxgumsio lizya
His child has been pushed up the tree.

Clause 67 is derived from source clause BS$_3$.

67. BA oza: sin.tx sxgumsidue
His child is push-able up a tree. or (One) can push his child up a tree.

Clause 68 is derived from source clause BS$_2$.

68. SA sin.tx sxgumsisidue
(One) can push (things) up a tree. or (Things) are push-able up a tree.

69-71. (Applies to a sub-set of inherent T, BT only--see section 2d)

Clause 72 is derived from source clause ST$_1$.

72. SS no sin.tx guhmdx le
He has climbed up a tree.

73. /em/

51. Source clause for Cv derivations.

BTk$_3$ nga: nolay sin.tx guhmo ngapxrin.ke (from ST$_1$)
I made him climb up a tree.

Clauses 52 through 54 are derived from source clause BTk$_3$.

52. BSk nga: nolay sin.tx guhmo pxrin.dx nganxy.e
I have made him climb up a tree.

53. R nga: nolay sin.tx guhmo pxrin.o take
I ought to make him climb up a tree.

54. aBRk nolay sin.tx guhmo pxrin.sike
(I) made him climb up a tree.

55. Source clause for Pm derivations.

BTp_3 nga: nolay sin.tx guhmo ngaeke (from ST_1)
I allowed him to climb up a tree.

Clauses 56 through 58 are derived from source clause BTp_3.

56. BSp nga: nolay sin.tx guhmo yadx nganxy.e
I have allowed him to climb up a tree.

57. R nga: nolay sin.tx guhmo yao take
I ought to allow him to climb up a tree.

58. aBRp nolay sin.tx guhmo yasike
(I) allowed him to climb up a tree.

Clause 59 is derived from source clause ST_1.

59. R no sin.tx guhmo take
He ought to climb up a tree.

60. /S/

01. Source clause for Dm derivations.

S_3 nga: sin.tx guhmo ngapxyn.zya
I want to climb up a tree.

Clauses 02 through 010 are derived from source clause S_3.

02. T nga: sin.tx guhmo ngapxyn.ke
I came-to-want to climb up a tree.

03. S nga: sin.tx guhmo pxyn.dx nganxy.e
I have come-to-want to climb up a tree.

04. aR sin.tx guhmo pxyn.sike
(I) came to want to climb up a tree.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: sin.tx guhmo ngapxyn.nazya
I am coming-to-want to climb up a tree.

010. S nga: sin.tx guhmo pxyn.nadx nganxy.e
I have been coming-to-want to climb up a tree.

Clause 74 is derived from source clause ST_2.

74. aSR sin.tx guhmsike
(I) climbed up a tree.

Clauses 75 and 76 may be derived either from ST_1 or ST_2.

75. SR sin.tx guhmsio
On the tree was climbed. (The tree was climbed on.)

76. SA sin.tx guhmsio lizya
On the tree has been climbed. (The tree has been climbed on.)

Clause 77 is derived from source clause SS_1.

77. SA sin.tx guhmsidue
Up the tree is climb-able. or (One) can climb up a tree.

2d. Transitive and BiTransitive derivations (illustrated by an inherent BiTransitive clause)

36. Source clauses for BiTransitive derivations.

BT_1 noe sin.ka kan.ni hxykeo
He took a speck out of the food.

BT_2 nga: sin.ka kan.ni ngahxyke
I took a speck out of the food.

BT_3 nga: (ngalay) zihmni ngahxyke*
I took myself out of the house. (I got out of the house.)

BT_4 noe (nolay) zihmni hxykeo*
He took himself out of the house. (He got out of the house.)

BT_5 nga: (something) kan.ni ngahxyke.*
I took something out of the food.

BT_6 gahme syaola phxrle keo
The sun shriveled the young shoots.

36a. Source clauses for gP derivation.

BS_1 (one)(one) zihmni hxy.o*
One takes himself (gets) out of the house from time to time.

BS_2 (one)(things) kan.ni hxy.o*
One takes things out of food.

BS$_3$ (one) sin.ka kan.ni hxy.o*
One takes specks out of food.

Clause 37 is derived from source clause BT$_1$.

37. BS noe sin.ka kan.ni hxydx nxy.o
He has taken a speck out of the food.

Clause 38 is derived from source clause BT$_3$.

38. ST nga: zihmni ngahxysike
I got out of the house.

38a. Source clause for qP derivation.

SS$_1$ (one) zihmni hxysiē
One gets out of the house (from time to time).

Clauses 39 and 40 are derived from source clause BT$_3$.

39. SS nga: zihmni hxysidx ngale
I have gotten out of the house.

40. aSR zihmni hxysisike
(I) got out of the house.

Clause 41 is derived from source clause SS$_1$.

41. SA zihmni hxysisie
(One) gets out of the house (from time to time).

42. /em/

51. Source clause for Cv derivations.

BTk$_1$ nga: nolay zihmni hxysio ngapxrin.ke (from BT$_4$)
I made him get out of the house.

Clauses 52 through 54 are derived from source clause BTk$_1$.

52. BSk nga: nolay zihmni hxysio pxrin.dx nganxy.e
I have made him get out of the house.

53. R nga: nolay zihmni hxysio pxrin.o take
I ought to make him get out of the house.

54. aBRk nolay zihmni hxysio pxrin.sike
(I) made him get out of the house.

55. Source clause for Pm derivations.

BTp$_1$ nga: nolay zihmni hxysio ngaeke (from BT$_4$)
I allowed him to get out of the house.

Clauses 56 through 58 are derived from source clause BTp$_1$.

56. BSp nga: nolay zihmni hxysio yadx nganxy.e
I have allowed him to get out of the house.

57. R nga: nolay zihmni hxysio yao take
I ought to allow him to get out of the house.

58. aBRp nolay zihmni hxysio yasike
(I) allowed him to get out of the house.

Clause 59 is derived from source clause BT$_4$.

59. R no zihmni hxysio take
He ought to get out of the house.

60. /S/

01. Source clause for Dm derivations.

S$_1$ nga: zihmni hxysio ngapxyn.zya (from BT$_3$)
I want to get out of the house.

Clauses 02 through 010 are derived from source clause S$_1$.

02. T nga: zihmni hxysio ngapxyn.ke
I came-to-want to get out of the house.

03. S nga: zihmni hxysio pxyn.dx nganxy.e
I have come-to-want to get out of the house.

04. aR zihmni hxysio pxyn.sike
(I) came to want to get out of the house.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: zihmni hxysio ngapxyn.nazya
I am coming-to-want to get out of the house.

010. S nga: zihmni hxysio pxyn.nadx nganxy.e
I have been coming-to-want to get out of the house.

Clauses 43 through 47 are derived from source clause BT$_2$.

43. BT nga: nolay sin.ka kan.ni hxydx ngaeke
I took a speck out of the food for him.

44. BS nga: nolay sin.ka kan.ni hxydx yadx nganxy.e
I have taken a speck out of the food for him.

45. R nga: nolay sin.ka kan.ni hxydx yao take
I ought to take a speck out of the food for him.

46. S nga: nolay sin.ka kan.ni hxydx yao ngapxyn.zya
I want to take a speck out of the food for him.

47. aBR nolay sin.ka kan.ni hxydx yasike
(I) took a speck out of the food for him.

Clauses 48 and 49 may be derived either from BT_1 or BT_2.

48. BR nolay sin.ka kan.ni hxydx yasio
A speck was taken out of the food for him.

49. BA nolay sin.ka kan.ni hxydx yasio lizya
A speck has been taken out of the food for him.

Clause 50 is derived from source clause BT_2.

50. pBT nolay sin.ka kan.ni nga: hxydx ngaeo
The speck was taken out of the food for him by me.

51. Source clause for Cv derivations.

BTk_2 nga: nolay sin.ka kan.ni hxy.o ngapxrin.ke (from BT_1)
I made him take a speck out of the food.

Clauses 52 through 54 are derived from source clause BTk_2.

52. BSk nga: nolay sin.ka kan.ni hxy.o pxrin.dx nganxy.e
I have made him take a speck out of the food.

53. R nga: nolay sin.ka kan.ni hxy.o pxrin.o take
I ought to make him take a speck out of the food.

54. aBRk nolay sin.ka kan.ni hxy.o pxrin.sike
(I) made him take a speck out of the food.

55. Source clause for Pm derivations.

BTp_2 nga: nolay sin.ka kan.ni hxy.o ngaeke (from BT_1)
I allowed him to take a speck out of the food.

Clauses 56 through 58 are derived from source clause BTp_2.

56. BSp nga: nolay sin.ka kan.ni hxy.o yadx nganxy.e
I have allowed him to take a speck out of the food.

57. R nga: nolay sin.ka kan.ni hxy.o yao take
I ought to allow him to take a speck out of the food.

58. aBRp nolay sin.ka kan.ni hxy.o yasike
(I) allowed him to take a speck out of the food.

Clause 59 is derived from source clause BT_1.

59. R noe sin.ka kan.ni hxy.o take
He ought to take the speck out of the food.

60. /S/

01. Source clause for Dm derivations.

S_2 nga: sin.ka kan.ni hxy.o ngapxyn.zya (from BT_2)
I want to take the speck out of the food.

02. T nga: sin.ka kan.ni hxy.o ngapxyn.ke
I came-to-want to take the speck out of the food.

03. S nga: sin.ka kan.ni hxy.o pxyn.dx nganxy.e
I have come-to-want to take the speck out of the food.

04. aR sin.ka kan.ni hxy.o pxyn.sike
(I) came-to-want to take the speck out of the food.

05.-08. (Applies to a sub-set only--see section 2f)

09. T nga: sin.ka kan.ni hxy.o ngapxyn.nazya
I am coming-to-want to take the speck out of the food.

010. S nga: sin.ka kan.ni hxy.o pxyn.nadx nganxy.e
I have been coming-to-want to take the speck out of the food.

Clauses 61 through 63 are derived from source clause BT_2.

61. pBT sin.ka kan.ni nga: ngahxy.o
The speck was taken out of the food by me.

62. pBS sin.ka kan.ni nga: hxydx nganxy.o
The speck has been taken out of the food by me.

63. aBR sin.ka kan.ni hxysike
(I) took the speck out of the food.

Clause 64 is derived from source clause BT_5.

64. aSR kan.n [illegible]ysisike
(I) took (something) out of the food.

Clauses 65 and 66 may be derived either from BT_1 or BT_2.

65. BR sin.ka kan.ni hxysio
The speck was taken out of the food.

66. BA sin.ka kan.ni hxysio lizya
The speck has been taken out of the food.

Clause 67 is derived from source clause BS$_3$.

67. BA sin.ka kan.ni hxysie
(One) takes specks out of food. or Specks are to be taken out of food.

Clause 68 is derived from source clause BS$_2$.

68. SA kan.ni hxysisie
(One) takes (things) out of food.

Clauses 69 through 71 are derived from source clause BT$_6$.

69. R syaola phxrle:sike
The young shoots shriveled.

70. A syaola phxrle:sidx le
The young shoots have shriveled.

71. A syaola phxrle:sio lizya
The young shoots are shriveled.

2e. Descriptive derivations

1a. Source clause for Descriptive derivations.

D$_I$ nga: nxkx ba ba ngangxmsizya
I enjoy going there.

Clause 1b is derived from source clause D$_1$.

1b. I nga: nxkx ba ba ngangxmsike
I came-to-enjoy going there.

1ba. Source clause for qP derivation.

D$_2$ (one) nxkx ba ba nqxmsie*
One enjoys going there.

Clauses 1c and 1d are derived from source clause D$_1$.

1c. D nga: nxkx ba ba nqxmsidx ngale
I have come-to-enjoy going there.

1d. aE nxkx ba ba nqxmsisike
(I) came-to-enjoy going there.

Clause 1e is derived from source clause D$_2$.

1e. C nxkx ba ba nqxmsisie
(One) enjoys going there. or It's enjoyable going there.

Clauses 1f and 1g are derived from source clause D_1.

1f. I nga: nxkx ba ba ngangxmsinazya
I am coming-to-enjoy going there.

1g. D nga: nxkx ba ba ngxmsinadx ngale
I have been coming-to-enjoy going there.

2f. Stative derivations

01. Source clause for Stative derivations.

S_1 nga: zihm jxy.o ngasxyn.zya
I know how to build a house.

Clause 02 is derived from source clause S_1.

02. Source clauses for Ev 1 derivations.

T_1 nga: zihm jxy.o ngasxyn.ke
I came-to-know (learned) how to build a house.

T_2 nga: (ngalay) ngasxyn.ke*
I came-to-know myself (I woke up).

02a. Source clause for gP derivation.

S_2 (one)(one) sxyn.o*
One comes-to-know oneself (one wakes up).

Clauses 03 and 04 are derived from source clause T_1.

03. S nga: zihm jxy.o sxyn.dx nganxy.e
I have learned how to build a house.

04. aR zihm jxy.o sxyn.sike
(I) learned how to build a house.

Clauses 05 through 07 are derived from source clause T_2.

05. I nga: ngasxyn.sike
I knew (I woke up).

06. D nga: sxyn.sidx ngale
I have woken up.

07. aE sxyn.sisike
(I) woke up.

Clause 08 is derived from source clause S_2.

08. C sxyn.sisie
(One) wakes up (at times).

Clauses 09 and 010 are derived from source clause S_1.

09. T nga: zihm jxy.o ngasxyn.nazya
I am coming-to-know how to build a house.

010. S nga: zihm jxy.o sxyn.nadx nganxy.e
I have been learning how to build a house.

V. DEPENDENT PATTERNS

In this section, variants of Kham clause patterns will be illustrated which are not independent. Although a complete description of these dependent clauses cannot be given at this point, the clauses will be introduced briefly here according to their form and function.

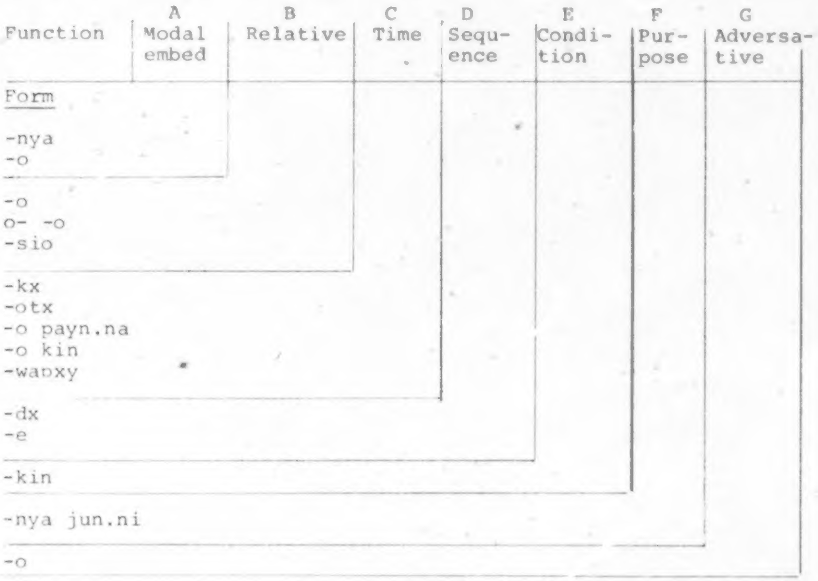

Function
A Modal embed
B Relative
C Time
D Sequence
E Condition
F Purpose
G Adversative
Form
-nya
-o
-o
o- -o
-sio
-kx
-otx
-o payn.na
-o kin
-wapxy
-dx
-e
-kin
-nya jun.ni
-o

Figure 43. Dependent clauses in Kham. (Capital letters refer to sections following.)

A. Modal Embedding

Where clauses embed to modal-like verbs, the following two forms are used: -nya, -o. In many cases, the two forms are interchangeable with no apparent difference in meaning. Both forms are non-finite.

1) -nya

nga: nxn.sx ba-nya matae
Is it all right for me to go with you?

nga: be:h jxy-nya ngamasxyn.e
I don't know how to make a basket.

ap-nya ro
Is it true that you are going to shoot?

2) -o

nxkx ba-o madxysi
It is not possible to go there.

nga: syan.-o ngajxysike
I pretended to be sleeping.

nga: syakxri kxy kxy-o ngangxmsizya
I enjoy eating meat.

B. Relative

Any clause in Kham may be converted to a relative (or adjectival) clause. Such a construction may function either as the modifier in a modifier-head construction, or where the head is deleted, as the head itself. That is, the relative clause may function either as a verbal-adjective or as a verbal-noun. In the latter case, all noun markers (agent, goal, number, locative, etc.) may be applied to the construction.

There are three types of relative constructions. The first is formed by adding the affix -o to the non-finite verb stem of the clause to be relativized. Where this first form occurs, the relative clause modifies a head (expressed or deleted) which functions as subject of the relative clause. That is, where the verb of the relative clause belongs to the transitive set, the modified head is the actor of the relative clause. Where the verb belongs to the A- or R-sets, the modified head is the undergoer of the relative clause. For example, the relative form of the T verb jxy-o 'make' may modify only the actor of the relative clause, as in jxy-o mi: 'the man who made' or jxy-zya-o mi: 'the man who is making.' With a deleted head, the relative verb functions as the head itself, as in jxy-o 'he who made.'

1) -o with head

ao be:h jxy-o mi: ramzx
The man who made this basket is Ram.

2) -o with deleted head

talakxo ehn ki:-o-e achim zihm jxyzyao
Act (Agt) Time Und Evt
The one who was plowing the field the other day is building a house today.

noe si-o-lay rahlkeo
Act Und(Gol) Evt
He buried the one who died.

nxkx lizya-o-ra-lay yacyu:zyao
Und- pl-Gol Evt
He is looking at those who are over there.

The second type of relative construction is used only with transitive-set verbs and is formed by changing the verb of the clause to be relativized to passive verb form. Where this form occurs, the relative clause modifies a head (expressed or deleted) which functions in any role but the actor of the relative clause, as in o-jxy-o chyam 'the day when he made it.' o-jxy-o po:kx 'at the place where he made it,' or o-jxy-o be:h 'the basket which he made.' Where the head is deleted, the construction is understood as modifying only the undergoer of the relative clause, as in o-jxy-o 'that which he made,' or o-yan.-o 'that which he gave to me.'

1) o- -o with head

ao rame o-jxyzya-o be:h
This is the basket that Ram is making.

ao nga-syan.-o po:
This is the place where I slept.

2) o- -o with deleted head

ao rame o-jxy-o
This is that which Ram made.

no la: ge-lizya-o-da huzya
Act Loc Evt
That leopard is coming to where we are.

nga: nga-cyu:zya-o-e sin. tuhzyao
Act (Agt) Und Evt
He whom I am watching is chipping wood.

The third type of relative clause (verb stem plus -si-o is the same in all respects to the second type with the exception that the actor has been deleted by -si.

1) -sio with head

poh-sio mi: akx lizya
The man who was beat is here.

ao pxl-sio sin.
This is cut wood.

2) -sio with deleted head

jyallx ja:h-sio puluske
He who was put in jail escaped.

baza sxcyan.-sio-tx cyuhsidx le
Act Sit (Loc) P
The bird is sitting on that which was erected.

C. Time

1) -kx

Dependent time clauses using -kx may be inflected for punctilliar, continuous, or axiomatic aspect as illustrated in the following examples:

ram zihmda o-ba-kx tubu la: huke
When Ram went home a leopard came. (punct.)

rame kan. u-zyu-zya-kx ngahuke
I came while Ram was eating his meal. (cont.)

ka:h bxre:-kx mi: lepo
When dogs are petted they lick people. (axio.)

2) -otx

mxhre ngagohr ojxy-otx rxyke
As soon as the blacksmith has made my plow, bring it.

nga: ngaso-otx ngahuya
I will come as soon as I get up.

3) -o payn.na

nimi upulus-o payn.na ginba
At the moment the sun comes up, let's go.

ram osxche:na-o payn.na ngagxhrke
At the moment Ram scared me, I cried.

4) -o kin

ram uhun.-o kin ngabaya
After Ram comes I will go.

rame uhu:h ohxy-o kin ngapohke
After Ram took the handle off, I hit him.

5) -wapxy (used only with negative)

nga: kan. ngamazyu-wapxy tahucyo
As long as I haven't eaten, don't come.

gelay omacyu:si-wapxy cao taya
It will be good as long as he doesn't see us.

D. Sequence

The following two dependent clauses are non-finite and must share a subject with the main clause. Dependent clause with -dx indicates consecutive action; that is, the action of the dependent clause has been performed prior to the action of the main clause. Dependent clause with -e indicates simultaneous action; that is, the action of the dependent clause is performed at the same time as the action of the main clause.

1) -dx

ram gur gur-dx bake
Ram, having shouldered his load, went.

ram guhle da:dx sike
Ram, having been bitten by a snake, died.

2) -e

rame ehn. ki:-e ki:-e ada huzya
Ram is coming this way, plowing the field.

rame gxhr-e gxhr-e en dozyao
Ram is doing his work crying.

E. Condition (-kin)

The dependent conditional clause is non-finite in tense but finite in person and number. Its tense corresponds to the tense of the main verb.

nxn. nxhu-kin tanya oleo
It would have been good if you had come.

oe: omata-kin banke
If the price isn't right, get going!

nga: wahsx ngadxy-kin gxran.nya ngale
If I obtain medicine, I may get well.

F. Purpose (-nya jun.ni)

sxn lxhn.-nya jun.ni bakerx
They went to buy wool.

baza kyo:h-nya jun.ni kuhm ngajxyke
I made a trap in order to catch a bird.

kata jxy-nya jun.ni nxtxyh.o
For what reason did you wreck it?

G. Adversative (-o)

ram ahjyo oba-o ahpxy mahutae
Ram went yesterday, but he hasn't come back yet.

bani hxy ngado-o mabae
I said "Go", but he didn't go.

ri:h alx ja:hsi-o daso oleo leo
The water was put in here, but now it's empty.

REFERENCES

Halliday, M.A.K. 1967. Notes on transitivity and theme in English Part 2. Journal of Linguistics 3.199-244.

Watters, David and Nancy. 1973. An English-Kham, Kham-English Glossary. Summer Institute of Linguistics, Kirtipur.

Watters, David E. 1971a. Kham phonemic summary. Tibeto-Burman phonemic summaries - X, Summer Institute of Linguistics and Tribhuvan University, Kathmandu. Mimeographed.

__________. 1971b. A guide to Kham tone. Guide to tone in Nepal part III, Summer Institute of Linguistics and Tribhuvan University, Kathmandu. Mimeographed.

FOOTNOTES

[1] For the theoretical background and basic approach, see Austin Hale, Toward the systematization of display grammar, in this volume.

[2] One should be careful to note that there is a *distinction* between the terms *passive form* and *passive voice*. Passive forms do not necessarily have a passive interpretation. For example, certain post-verbal particles (*ro* 'tag questions,' *zx* 'absolutive,' leo 'exclamation') control the passive form without passive interpretation Thus passive *forms* signal passive *voice* only in the absence of such markers. See "Exceptions to the Passive ...," III.C.6.

[3] Figures 12, 14, 15, and 16 may be viewed as rules belonging to the set of rules required for the generation of verb forms in Kham. To interpret them in this way we must supplement them with rules, of which the following constitutes a tentative sample:

1) Verb nucleus ---→

p-n 1 p-n 2 stem p-n 3 tense $\left\{\begin{array}{l}\text{p-n 4}\\ \text{passive -}\underline{\text{o}}\end{array}\right.$

2) stem : (A) (S) (U)
S : Gol, Log/Asc

3) A : 1st prs, 2nd prs, 3rd prs
S
U

4) A : sg., dual, pl.
S
U

Rules with arrows assign constituent structure for a frame of slots. Rules with colons assign features to slots in the frame of slots, in this case to the elements of the verbal nucleus.

Suppose we apply rule 1 to obtain:

p-n 1 p-n 2 stem p-n 3 tense p-n 4

Then suppose that we choose a Transitive stem by choosing AU in rule 2 (in rule 2 we are allowed to choose any one, any two, or all three). Going to the dictionary we find that *poh* 'hit' is a basic Transitive (AU) verb:

p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
		AU			
		poh			

In rule 3 we assign person to the roles chosen in rule 2. Suppose we choose a first person actor and a third person undergoer:

p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
		poh			
		A 1st prs			
		U 3rd prs			

In rule 4 we assign number to the roles chosen in rule 2. Suppose we choose a singular actor and a plural undergoer:

p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
		poh			
		A 1st sg			
		U 3rd pl			

Next we consult Figure 15 to determine the form of the actor marker. We find that the first person singular actor has the form *nga*. We now consult Figure 12 to determine the position of the actor marker in the active verb form (the form we chose in rule 1). We find that an actor can occur in a T or BT verb in one of two positions, depending upon the person of the actor. We have chosen a first person actor, and so the actor marker will occur in position p-n 1:

p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
nga		poh			
		A 1st sg			
		U 3rd pl			

Now we consult Figure 16 to determine the form of a third person plural undergoer. Under T and BT forms, we find the form of the 3rd plural is *ra* with any actor if *ra* is not the first morpheme in the verb; *yara* where there is a dual or plural actor and if *yara* is the first morpheme in the verb; and *ya* in all other cases. In the present instance the morpheme *nga* is in p-n 1 position as the first morpheme in the verb; thus the form of the undergoer will be *ra*. In Figure 12 we find that a Transitive 3rd person undergoer occurs in position p-n 2:

p-n 1	p-n 2	stem	p-n 3	tense	p-n 4
nga	ra	poh			
		A 1st sg			
		U 3rd pl			

In no case will more than two of the numbered person-number positions be filled. In cases in which there is only one role, only one of these positions will be filled. In addition, locative sites will not be marked in the verb; since only locative sites have been found in ST, BR, and BA, these types will have only one numbered position filled. As the derivation above stands, then, only the tense form needs to be specified in order to generate a well-formed verb in Kham. Deleting the unneeded positions and specifying a past tense form -ke, we get the verb:

nga-ra-poh-ke 'I hit them'

Since our primary interest in this section has been in person and number affixes, we have not specified the rules for the assignment of tense.

In the above example the number of roles corresponded to the number of person-number affixes in the verb. We now derive a BiTransitive verb in which there are three roles but only two person-number affixes in the verb. Suppose we choose the passive option:

By rule 1:	p-n 1	p-n 2	stem	p-n 3	tense	passive -o
By rule 2:			A			
			S			
			U			

Going to the dictionary we find that ya 'give' is a basic BiTransitive (ASU) verb with a goal site.

By rules 3 and 4:

p-n 1	p-n 2	stem	p-n 3	tense	passive -o
		ya (Gol Sit)			
		A 3rd pl			
		S 1st dl			
		U 3rd dl			

Next we consult Figure 15 to determine the form of 3rd plural actor in the passive form. We find that the form is ya. In Figure 14 we find that any actor in passive form occurs in position p-n 1:

p-n 1	p-n 2	stem	p-n 3	tense	passive -o
ya		ya			
		A 3rd pl			
		S 1st dl			
		U 3rd dl			

The next ordered step is to determine the form of a first person dual site. Consulting Figure 16, we find that it specifies forms for Gol sites only. Loc and Asc sites are not marked in the verb. Thus, where the BT verb is specified in the dictionary as having a Loc or Asc Sit, one must recycle through the same figure to find a form for undergoers. The BT verb under present consideration, however, does have a goal site, and Figure 16 designates sin as the appropriate form. Figure 14 specifies its position in the verb as p-n 3 (since it is 1st person):

p-n 1	p-n 2	stem	p-n 3	tense	passive -o
ya		ya	sin		
		A 3rd pl			
		S 1st dl			
		U 3rd dl			

We now have two person-number markers in the verb (the maximum), so we need only supply the passive marker -o and the passive past tense marker, which is 0, and we have the verb form:

ya-ya-sin-o '(They) were given to us(2) by them'

Note that the same form might mean, 'It was given to us two by them,' since undergoers are not marked in the verb in the presence of a goal site.

[4] This set of markers represents an interesting intersection of role and focus marking. The marking function of this affix set is disjunct in both systems: as a role marker the actor-marking function is invariant over the passive in the transitive set, whereas the subject-marking function is not. As a focus marker, the subject-marking function is invariant for all active clause types, whereas the role-marking function is not.

[5] -ke marks the active past tense: past tense is marked by -ke and active form is represented by 0. In passive past tense, -o marks the passive form and past tense is represented by 0.

[6] This -o is not the passive marker, but rather the 3rd person singular actor marker in active form. Actor markers are prefixes in the passive form. See Figure 14, Section II.A.2.

[7] Data collected from various parts of the clause paper suggest the notion that there are varying degrees of nuclearity associated with the three nuclear roles actor, undergoer, and site. The suggestion is not a disturbing one, except that the role labelled "site" is clearly divided between goal sites and locative sites in degrees of nuclearity. There is evidence that this is true also in other Tibeto-Burman languages of Nepal and may be the case in other language families as well. Whether this will require a re-thinking of the notion "site" as it is presently defined within the model is not certain. At present we are simply noting the evidence as follows:

1) Natural word order in BT clauses (see Section II.C.1):
   Act, Gol, Und (with Gol Sit)
   Act, Und, Loc (with Loc Sit)

2) Pronominal markers in BT verbs (see Figure 10). In a BT clause with Gol Sit, Act and Sit are marked in the verb. In a BT clause with Loc Sit, Act and Und are marked in the verb. Thus Gol Sit outranks Und and Und outranks Loc Sit.

3) Gol-marked noun phrases in BT clauses (see Figure 4). Where the BT clause has a Gol Sit, the Sit is marked by the goal marker -lay and the Und is unmarked. Where the BT clause has a Loc Sit, the Und is marked by the goal marker -lay.

4) Double function embedding (see IV.B.4). Where a clause is embedded to a BT verb which causes double function, both the embedded actor and the greater predicate (GP) must be reinterpreted in terms of the roles which are nuclear to the new verb. Where the new verb is BT with a Gol Sit, the actor of the embedded clause is reinterpreted as a Gol Sit and the GP as an Und. Where the new verb is BT with a Loc Sit, the actor of the embedded clause is reinterpreted as an Und and the GP as a Loc Sit. For example:

Permissive (BT with Gol Sit)

noe ngalay zihm jxy.o ya-n.-ke-o
he me-Gol house make he-gave-to me
Act Sit (Und) P
He allowed me to make a house.

Ingressive (BT with Loc Sit)

noe ngalay zihm jxynyatx thu:-na-ke-o
he me-Gol house make-in he-started-me
Act Und (Loc Sit) P
He started me in making a house.

5) The role of subject of passive BT clauses (see Figures 18 and 19). In BT clauses with a Gol Sit, the Sit is subject. In BT clauses with a Loc Sit, the Und is subject.

---

[8] The question often makes use of the contrastive focus marker te to mark the expected theme in the answer. Thus the question,

rame te ri:h kan-lx o-ja:h-o
Where did Ram put the water?

asks for Ram as the theme and the place as new information. The answer, then, is,

rame ja:-lx ja:h-ke-o
Ram (in contrast to the others) put it in the pot.

See "Contrastive emphasis te," II.A.3d.

[9] For simplicity of exposition, we are temporarily ignoring the distinction between the formal marking of moods in Kham and their uses in a given speech act. We are concerned here only with a norm in which the formal marking and the speech act are related in a relatively direct manner. We ignore for the moment such skewing of form and use as may be found in questions used as emphatic statements, such as the following:

kata alx mahursisidue
what here-in one-cannot-bathe
What do you mean one can't bathe in here? (Of course one can!)

[10] It is expected that a study of discourse and other units higher than clause will shed much light on the passive verb form as a whole. To interpret passive forms from a clause level viewpoint appears to be quite inadequate and at times forces superficial interpretations. At the time of completing this paper it appears that the basic difference between active and passive verb forms is a discourse-oriented difference. Active forms mark those parts of a discourse which belong to the main chain of events, whereas passive forms mark background information, explanatory flashbacks, parenthetical information, etc. No doubt many of the remarks on passive forms in this paper will be reinterpreted under such a study, and those items which are now interpreted as exceptions will probably belong to the mainstream of interpretation.

[11] Note the potential ambiguity between,

cyu:sinke	Look at us two
cyu:sinke	Look at yourself

The breakdown of morphemes in the two examples is:

cyu:-sin-0-ke
stem-1dU-2sA-ipr

cyu:-si-n-ke
stem-Itv-2sA-ipr

The first example is a Transitive clause in which sin is a single morpheme representing a 1st dual undergoer. In Transitive verbs, the 2nd person actor 'you' is marked by 0.

The second example is a derived Reflexive or Intransitive clause in which si represents the reflexive. In Intransitive verbs, the 2nd person actor 'you' is marked by -n.

[12] In support of this analysis, note that the affixes -na and -hu behave like main verbs in respect to the auxiliary system. Aspect-modality affixes and other affixes of the finite system occur with the auxiliary stem wherever an auxiliary occurs. Affixes of the finite system do not occur on the main verb stem. For example,

rame be:h ma-jxy-ca-o	Ram didn't make the basket yet
rame be:h jxy-dx ma-nxy-ta-o	Ram hasn't made the basket yet

Where the affixes -na and -hu occur in a clause which has an auxiliary construction, however, they do not occur as affixes within the auxiliary but remain with the original verb stem. For example,

rame be:h jxy-na-ke-o	Ram went to make a basket
rame be:h jxy-na-dx nxy-o	Ram has gone to make a basket

[13] After the tree diagram in Figure 42 was completed, a new representation was devised to display possible derivational histories. The new representation has both the advantages of being more compact and of handling all inherent types (including BT, ST, BR, and BA which have been omitted from Figure 42). See Austin Hale, Toward the systematization of display grammar, Figures 8 and 9, in this volume.

[14] It should be noted that not all clause types belonging inherently to a given cell in the transitivity matrix are capable of being derived to all nodes illustrated for that cell in Figure 42. That is, certain sub-classes of verbs are restricted in their derivation potential. The tree illustrates the derivation potential of those sub-classes which are greatest in derivation potential (which also happen to be the largest sub-classes).

Although little work has been done to date on Box 5 of Pike's nine-box tagmeme, it seems probable that Box 5 would be particularly useful in systematizing these semantic constraints on derivation. Take, for example, an inherently Attributive verb. The nUd rule applies only to those Attributive clauses which have weather or natural phenomena in Box 5 of the predicate tagmeme.

P	VP
A	weather

Likewise, a verb such as kxre:nya 'to hunger' is an inherently Receptive verb. Due to the semantic fact, however, that hunger is a non-transferable experience, the verb will not undergo transitivization as do most other Receptive verbs. Thus, the predicate tagmeme may be marked as follows:

P	VP
R	non-transferable experience

APPENDICES

A. Abbreviations

A	Attributive
A	adjunct
aBR	active BiReceptive
Ac	activizer rule
aC	active Circumstantial
Act	actor
ACv	Attributive causative rule
aE	active Eventive
Agt	agent
anim	animate
aR	active receptive
aR	active Receptivizer rule
aRUd	active receptive underdoer deletion
aSA	active SemiAttributive
Asc	associative site
aSR	active SemiReceptive
Att	attributive embedding
BA	BiAttributive
Bf	benefactive rule
BR	BiReceptive
BS	BiStative
BT	BiTransitive
C	Circumstantial
CE	contrastive emphasis
Cpl	complement
Cv	causative rule
D	Descriptive
dAc	de-activizer rule
dl	dual
Dm	desire modal
E	Eventive
Em	enjoyment modal
Ev	eventivization rule
Evt	event
FE	factual emphasis
fut	future tense
Gol	goal
GP	greater predicate
gP	generic pronominalization
I	Intransitive
IgK	ingressive causative rule

IO	indirect object
ipr	imperative
Itv	intransitivizer rule
Loc	locative
neg	negative
NP	noun phrase
nUd	non-contrastive undergoer deletion rule
O	object
Obl	obligation modal
P	predicate
P	passive
PC	predicate constituent
Pex	predicate extension
pl	plural
Pm	permissive rule
pres	present tense
pro	pronoun
Prp	purpose modal
pst	past tense
pStv	passive stativization rule
Pv	passive rule
PV	post verbals
R	Receptive
R	receptivizer rule
RE	reinforcive emphasis
Ref	referent
Rel	Relative clause
RUd	receptive undergoer deletion
S	Stative
SA	SemiAttributive
Sit	site
SS	SemiStative
ST	SemiTransitive
Sta	statant
Stv	stativization rule
Sub	subject
T	Transitive
tag	tag question
term	terminate past tense
tns	tense
Tv	transitivizer rule
Ua	undergoer addition rule
Umk	unmarked
Und	undergoer
Ur	undergoer replacement rule
VP	verbal phrase
1sA	1st person singular actor
1dA	1st person dual actor
1pA	1st person plural actor
2sA	2nd person singular actor
2dA	2nd person dual actor

2pA	2nd person plural actor
3sA	3rd person singular actor
3dA	3rd person dual actor
3pA	3rd person plural actor
1sS	1st person singular site (etc.)
1sU etc.	1st person singular undergoer (etc.)

B. Constraints on -lay As an Undergoer Marker

By eliciting specific Transitive and BiTransitive clauses in which the undergoers are made to alternate between 1) proper names and human pronouns, 2) human nouns, 3) animate non-human nouns, and 4) inanimate nouns and pronouns, it becomes quickly apparent that the first alternative is always marked, the second alternative is optionally marked, and alternatives 3 and 4 are normally unmarked. It would seem, then, that undergoer marking is chiefly a distinction of human versus non-human.

By checking through natural, spoken text materials, however, we find that the exceptions to a human versus non-human distinction are many, and that undergoer marking is not related to this distinction at all. Undergoer marking is no doubt related to discourse focus, although we are not yet sure of all the ramifications. In general, -lay marks the undergoer a) where it is specific to the narrative and b) under certain grammatical restrictions.

a) Specific to the narrative.

Proper names and human pronouns are always specific to a given narrative. For example, when we speak of John, we are referring to a specific man and not to a man in general or to any John in general.

Nouns which are not normally proper nouns may attain proper noun status under a number of conditions, of which the following list is only a sample:

Personification. Personification is a common narrative technique. By this technique emerge such notorious characters as "Br'er Bear," "Br'er Fox," etc.

Technical terms. A common noun can become a proper noun if it is defined as a technical term. For example:

ao	mxnxm	bxnxy	umin.otx	umin	kan.
this	cornmeal	well	it-cooks-upon	its-name	food

ao	kan.lay	obatxngx	gemazyue
this	food-Gol	alone	we-don't eat

This cornmeal, upon becoming well cooked, is called "*food*."
This "*food*" we do not eat alone.

Metonomy. Common nouns are sometimes used to refer to persons or groups of persons as illustrated in the following examples:

ser-e *na:khar-lay* yakihkeo
chief *village-Gol* he-called-them
The chief called *the village* together.

no-e *mxndir-lay* pon.kharikeo
he *temple-Gol* he-prayed
He prayed to *the temple* (its god).

Edicts and pronouncements. When an edict is pronounced, it seems that common nouns assume the status of a proper noun. For example:

achimkin *puwa-lay* jeko:kx utupani ko:cyo
today-from *puwa-Gol* when-you-peel its-tip-from peel-ipr
From today on, when you peel *the fiber plant*, peel it from its tip down.

Common versus proper nouns. Human, non-human animate, and inanimate nouns are always unmarked as undergoers unless they have been specifically identified earlier in the narrative. Note in the following pairs of examples that the difference between the presence and absence of the marker -*lay* corresponds closely to the English indefinite and definite articles *a* and *the*.

1) no-e *za:* dxykeo
she *child* found
She bore *a child*.

no-e *za:-lay* dxy-ke-o
she *child-Gol* found
She found *the child* (the one which had been lost).

2) no-e *ka:h* cyu:-ke-o
he *dog* saw
He saw *a dog*.

no-e *ka:h-lay* cyu:-ke-o
he *dog-Gol* saw
He saw *the dog* (the one mentioned earlier).

3) *cao* rxy-ke
good bring-ipr
Bring *a good one*.

cao-lay rxy-ke
good-Gol bring-ipr
Bring the good one.

Other examples from the Kham computer concordance:

nxkin ho gyahmo pxysa-lay barnalx lwi:h-keo
after-that previous red money-Gol wall-in stuck
After that he stuck that previously mentioned red coin into a wall.

phxri nime gohga-lay cyu:nakeo
again bear corn-Gol went to see
Again Br'er Bear went to see the corn (the corn which he went to see earlier).

b) Grammatical restrictions.

Consecutive-action clauses. In sentences consisting of a dependent-independent construction, where the independent verb comes from the attributive, receptive, or intransitive sets but the dependent, consecutive-action clause is from the transitive set, the undergoer is marked by -lay. For example:

1) hxy jxydx nehkhan.da-lay jorxydx ruhpdx thik
that doing two-strips-Gol joining sewing O.K.

otaotx noe umin kan.bul
upon becoming its name blanket

In this manner, by joining and sewing two strips together, upon being done it is called a blanket.

2) niwa-lay kaco zyudx kae
niwa-Gol raw eating bitter
Eating niwa raw is bitter.

Complements. Where the predicate is composed of a complement-verb construction, the undergoer is marked to prevent possible ambiguity with compound complements. That is, the construction,

Undergoer + Complement + Verb

when it is unmarked, could be confused with the construction,

Complement + Complement + Verb

For example:

ge: gohga-lay susar gedoe
we corn-GoI nurse we-do
We nurse our corn.

Without the presence of -lay in the above example, gohga 'corn' could be understood as a part of the complement with the predicate, meaning something like 'to corn-nurse something.'

Tentative Systemic Organization of Nepali Sentences

Maria Hari

CONTENTS

I. MINOR SENTENCES 205
  A. Minor A 205
  B. Minor B 207

II. MAJOR SENTENCE SYSTEM 208
  A. Pre-Nuclear Periphery 208
    1. Sentence Introducers with Temporal Notions . . 208
    2. Sentence Introducers with Logical Notions. . . 210
    3. Sentence Introducers with Amplificatory Notions. 212
    4. Patterns of Correspondence between Sentence Introducers and Complex Sentence Nuclei. . . . 215
  B. Post-Nuclear Periphery. 215
  C. Nucleus 217
    1. Simple versus Complex Sentence Nuclei. 217
    2. Systemic Organization of Complex Sentence Nuclei 218

III. DETAILED DESCRIPTION OF COMPLEX SENTENCE TYPES. 221
  A. Balanced Complex Nuclei 223
    1. Coordination Sentence. 223
    2. Alternation Sentence 226
    3. Constraint Sentence. 229
    4. Cause Sentence 231
    5. Excluding/Including Sentence 232
    6. Inversion Sentence 234
    7. Paraphrase Sentence. 235
    8. Enumeration Sentence 236
    9. Antithesis Sentence. 238
  B. Unbalanced Complex Nuclei 240
    1. Condition-Outcome Sentence 241

- 2. Equivalence Sentence 243
- 3. Concession-Outcome Sentence. 245
- 4. Reason Sentence. 247
- 5. Temporal Identification Sentence 248

C. Sentence Embedding. 249
- 1. Condition Sentence with Embedded Coordination Sentence in the Nucleus. 250
- 2. Reason Sentence with Embedded Coordination Sentence in the Margin 250
- 3. Condition Sentence with Embedded Inclusion Sentence in the Margin 251
- 4. Concession Sentence with Embedded Inclusion Sentence in the Margin 251
- 5. Constraint Sentence with Embedded Undefined Concession Sentence in Nucleus 1 252

REFERENCES 253

FOOTNOTES. 254

APPENDICES 256

A. Abbreviations Used in the Formulae. 256

B. Abbreviations Used as Glosses in the Examples . . . 257

C. Terminology Used for Tense, Aspect, and Mood. . . . 257
- 1. Complex Tenses Resulting from Intersection of Simple Tense and Aspect. 257
- 2. Other Tenses in Which Tense and Aspect are United 258
- 3. Dependent Participles. 258
- 4. Moods. 258

For the classification of Nepali sentences it has proved useful to distinguish between major and minor sentences. Major sentences have to meet the requirement of being clausal and structurally complete while minor sentences are structurally incomplete if clausal, or nonclausal. In some way minor sentences show reduced structure.

The first group has been termed major because these sentences are complete in form and occur much more frequently than the minor ones. Minor sentences are in the minority in any type of discourse and incomplete in form.

Some have used the terms independent versus dependent sentences for a similar binary division of sentence types. Though the notion of dependency is not irrelevant, we found it somewhat ambiguous since ultimately every sentence is dependent on its context. For example, discourse-opening sentences have a typical lexicon and structure for that particular function. In a different slot, such a sentence would be quite displaced. The context sensitivity of sentences is an amazing feature which needs careful study. A detailed treatment of this topic, however, goes beyond the limits of this paper.

I. MINOR SENTENCES

Before turning to the description of major sentence structures, a brief account of two classes of minor sentences should be given.

A. Minor A

Minor sentences of class A are characterized by situation dependency. They are semantically complete but structurally reduced. Most often they consist just of a word or a short phrase. The sentences of this group also contrast with the major sentence structures in that they reject peripheral elements. Figure 1 gives the six types of class A minor sentences in Nepali.

Sentence Types	Examples	
Exclamation	aabhi! oho! dhat! chi!	
Interjection	e, lau, la ta, naa	
Vocative	sarkaar!	'government'
	e saathi!	'hey friend'
	daajiu!	'elder brother'
Verification	saa'cci	'truly'
	? kuni	'who knows?'
	huna sakcha	'may be'
Response	ho, hoina	'yes, no'
	hajur, haos	
Final comment	siddhio	'finished'
	khatam	'ended'

Figure 1. Class A minor sentence types.

Examples. Since the sentences of this class are tied to specific situations, some of the examples cited above are given below in context. (All examples in this paper are given with morpheme breaks, with morpheme-by-morpheme translation below, and followed by free translation. In the Nepali text the question mark precedes the question and change of speakers is signalled with an X. See Appendix A for abbreviations used in glosses.)

1)

?	kasto	laag-io	ta	tapaai-laai'	gorkhaa.	X
	how	seem-pst,3s	att	you-to	Gorkha	

oho!	ramaailo	laag-io	ma-laai	ta.
ex	nice	seem-pst,3s	I-to	att

'How did you like Gorkha? Oh, it seemed very nice to me.'

2)

aabhi!	kati	raamro	phul!
ex	how	beautiful	flower

'Oh, what beautiful flowers!'

3)

e,	?	gorkhaa	jaa-nu	bha-eko	cha.
Interj		Gorkha	go-inf	aux.h-perf	aux,pr,3s

'Oh, have you been to Gorkha?'

4)

la ta,	?	timi	kasto	maha	banaau-na	sak-chau.
Interj		you	how	honey	make-inf	can-pr,2s

'Now, let's see how you can make honey.'

5)

tio	kharaaio	ga-era	bhan-io	baagh-laai:	sarkaar!
that	rabbit	go-sa	say-pst,3s	tiger-to	government

'That rabbit went to the tiger and said: "Your Majesty!"'

6)

baini!	X	hajur!
sister (younger)		yes

'Younger sister! - Yes!'

7)

ra	ti	serpaa-haru	paile,	hu-na	sak-cha,	tibbat-baaTa
and	those	Sherpa-pl	first	be-inf	can-pr,3s	Tibet-from

aa-eko	ho-lan.
come-perf	be-f,3pl

'And those Sherpas, perhaps they originally came from Tibet.'

8)

ani	aru	jaanabar-haru-le	bhan-e :	hun-cha,	tapaai'	raajaa
and	other	animal-pl-ag	say-pst,3pl	be-pr,3s	you	king

hu-nu	bh-o.
be-inf	aux.h-pst,3s

'And the other animals said: "O.K., you have become king."'

B. Minor B

The sentences of class B are characterized by context dependency. They are semantically and structurally incomplete, but they can be completed from the context. When they are thus completed they comprise all major sentence types. They therefore need no separate description. But it should be emphasized that they play an important role in discourse, especially in conversation. Elisabeth Bowman (1966:27) points out the following: On one hand the occurrence of context-dependent sentences cuts out a great deal of monotonous repetition in dialogues. On the other hand, the repetition of certain parts which could have been left out can be used to focus on the part which is repeated.

Examples. Here again it is necessary to give the context since these sentences are characterized by context dependency and are fully understandable only within their context. (All examples are numbered consecutively within each major section.)

9) ? tapaai'-le haat-khuTTaa ra peT-ko kathaa sun-nu
you-ag hand-foot and stomach-of story hear-inf

bha-eko cha. X sun-eko chai-na.
aux.h-perf aux,pr,3s hear-perf aux,pr-neg,1s

'Have you heard the story of hands, feet, and stomach? - I haven't heard it.'

10) ? timi-laai kasto laag-cha mero bicaar. X raamro
you-to how seem-pr,3s my thought nice

laag-cha ni.
seem-pr,3s att

'How do you like my ideas? - I like them.'

11) ? tiaa' caai' kasto khaal-ko maanis-haru bas-chan. X
there sp what kind-of people-pl live-pr,3pl

? kaa', ? naamce bajaar-maa. X naamce bajaar-maa.
where Namche Bazaar-in Namche Bazaar-in

'What kind of people are living there? - Where? In Namche-Bazaar? - Yes, in Namche-Bazaar.'

Sentence Fragments. When working with texts we often come across sentence fragments. While the anaphoric sentences of Class B are intentionally incomplete, sentence fragments are unintentionally incomplete. They result from false starts and from interruptions. Some sentences are also fragmentary because they have been abandoned before completion. Sentence fragments are non-systemic and are therefore not further described here.

II. MAJOR SENTENCE SYSTEM

Major sentences are characterized by an optional pre-nuclear periphery, an obligatory nucleus, and an optional post-nuclear periphery. The nucleus may be simple or complex. Figure 2 represents the major sentence formula graphically.

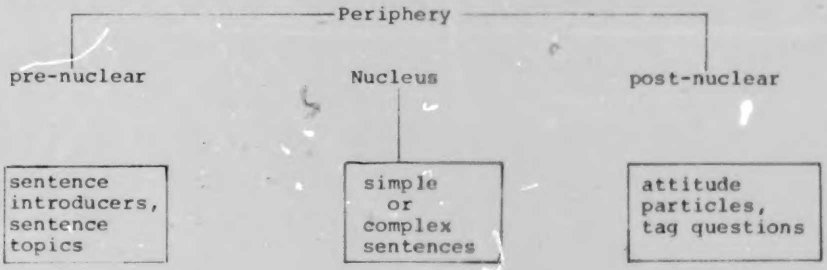

Periphery
pre-nuclear
Nucleus
post-nuclear
sentence introducers, sentence topics
simple or complex sentences
attitude particles, tag questions

Figure 2. Diagram of major sentence structure.

A. Pre-Nuclear Periphery

In the pre-nuclear periphery, sentence-introducing tagmemes with temporal, logical, and amplificatory notions occur.

The sentence introducers are peripheral to the sentence because they are not involved in the process of combining clauses. They establish temporal and logical relationships between the subsequent sentence nuclei. In principle any sentence introducer may occur with any sentence nucleus. Obviously there are semantic restrictions, but detailed investigation concerning such restrictions goes beyond the limits of this paper.

1. Sentence Introducers with Temporal Notions

Figure 3 is a list of the sentence introducers with varying degrees of temporal notions. The numbers in parentheses refer to the examples given below.

tes-pachi	'afterwards'	explicit temporal sequence	(12)
(tiaa' baaTa)	('from there')	(more colloquial form of tes-pachi	(13)
ani	'and then'	implicit temporal sequence	(14)
aba	'now'		
ra	'and'	focus non-temporal	(15)
saathai	'as well, at the same time'	concomitant	(16)

Figure 3. Sentence introducers with temporal notions.

Remarks. The conjunction ani is particularly frequent as a sentence introducer, and it may also combine as follows:

ani tes-pachi	'and after that'
ani aba	'and now'
ani saathai	'and at the same time'

Examples.

12) tes-pachi debi-ko pujaa gar-in-cha.
that-after goddess-of worship do-pas-pr,3s

'Afterwards the goddess is worshipped.'

13) ani etaa-baaTa caamal athabaa tibbat-maa na-paa-i-ne
and then here-from rice or Tibet-in neg-get-pas-def

cij-haru utaa lag-in-thio.
thing-pl there take-pas-pst.r,3s

'And then from here rice or other things which are not available in Tibet were taken there.'

14) aba tio jhi'gaa lobhi thi-o.
now that fly greedy be,pst.r-3s

'Now that fly was greedy.'

15) ra esari dhaan thankiaa-in-cha.
and this way rice store away-pas-pr,3s

'And this way the rice is stored away.'

16) saathai euTaa hindu-haru-ko tirtha-sthaan pani ho.
as well one Hindu-pl-of pilgrim-place also be,pr,3s

'At the same time it is a pilgrimage place for Hindus.'

2. Sentence Introducers with Logical Notions

The choice of a given sentence introducer is determined to some extent by the preceding context and to a greater extent by the following context. For the sentence introducers with logical notions, semantic context restrictions are particularly relevant. Figure 4 therefore states the semantic content of the context in which each sentence introducer may occur.

Sentence Introducers		Semantic Context		
Logical relation markers	Logical relations marked	Preceding sentence	Introduced sentence	
tes (kaaran)-(le) 'for that reason'	result	reason, circumstance	result	(17+18)
kina bhane-(dekhi) 'because'	cause	effect	cause	(19)
natra (bhane-(dekhi) 'otherwise'	negative result	condition	negative result	(20)
taa pani 'even so' (tara pani, ra pani)	concessive	situation, proposition	concession	(21)
tara 'but'	constraint	situation, proposition	adversive or constrained situation, proposition	(22)
baru 'rather'	preference stating	state, event	preferable state or event	(23)

Figure 4. Sentence introducers with logical notions.

Remarks. For the result sentence introducer, kaaran and -le are optional, but if one is absent the other must be present: tes-kaaran or tes-le. The result sentence introducer may permute to some grammatical juncture within the sentence nucleus. (See examples 17 and 18). Such permutation has not been observed with any of the other sentence introducers.

Result, cause, and negative result sentence introducers can not be followed by questions.

In the cause sentence introducer, -dekhi is optional, and in the negative result sentence introducer, bhane-dekhi is optional. The forms with -dekhi are colloquial forms.

kina bhan-e (lit: 'if saying why') and natra bhan-e (lit: 'if saying otherwise') are actually dependent conditional clauses with a specialized usage in which any other tagmeme is excluded. In this stripped form they serve as sentence introducers.

Examples. The numbers are referenced in Figure 4. The first sentence of each example is the sentence which precedes the illustrated introducer.

17) tio jhi'gaa lobhi thi-o. tes kaaran mauri-le maha
that fly greedy be,pst.r-3s that reason bee-ag honey

banaa-era us-laai dekh-aa-i-di-o.
make-sa he-to see-c-v-give-pst,3s

'That fly was greedy. Therefore, the bee showed her how she made honey.'

18) haamro io nepaal-maa dher-ai dher-ai debi-haru-ko murti-
our this Nepal-in many-em many-em goddess-pl-of statue-

haru bheTT-aa-i-ekaa chan. haami-haru tes kaaran-le
pl find-c-pas-perf,pl aux,pr,3pl we-pl that reason-for

debi-haru nai haamro Thulo deutaa samjh-era maan-i-eko
goddess-pl em our big god think-sa obey-pas-perf

ch cha.
aux,pr,3s

'Here in Nepal we find very many statues of goddesses. For that reason we think that the goddesses are our great god.'

19) tiaa' ta paile dhaan kaaT-in-cha ra ek dui din-samma
there att first paddy cut-pas-pr,3s and one two day-up to

khet-maa suk-aa-in-cha. kina bhan-e tio dhaan sajil-ai-
field-in dry-c-pas-pr,3s why say-perc that rice easy-em-

sa'ga jhaar-na sak-i-os.
with pull off-inf can-pas-opt,3s

'There the rice is cut first and then put to dry in the field for two to three days. That is done because then the rice can be easily beaten off.'

20) kaile pani haami-le miTho kuraa-maa lobh gar-nu hun-
when also we-ag sweet things-in greediness do-inf be-

dai-na. natra bhan-e haami euTaa jhi'gaa jastai chau'
pr,3s-neg otherwise we one fly alike be,pr,1pl

jun caahi' maha-maa Dub-era mar-io.
which sp honey-in sink-sa die-pst,3s

'We should never be greedy for sweet things; otherwise we are like a fly which sank into honey and died.'

21) tini-haru-laai her-na hu'-dai-na, haami-le. X taa pani
he-pl-to look-inf be-pr,3s-neg we-ag but even so

aaphu bhan-daa saanu-laai her-era citta bujh-aau-na
own say-ca small-to look-sa mind understand-c-inf

par-io.
must-pst,3s

'We must not look at them. - However, to make our minds happy we do have to look at the ones who are smaller than ourselves.'

22) sanTos garn-na sak-io bhan-e sab-ai kuraa bha-i-
satisfaction do-inf can-pst,3s say-perc all-em thing be-v-

haal-io. X tara sanTos ta unnati-ko baadhaa
put-pst,3s but satisfaction att progress-of obstacle

pani ho.
also be,3s-pr

'If one can be satisfied everything is O.K. - But satisfaction is also an obstacle to progress.'

23) tapaai na-jaa-nos. baru us-laai jaa-na di-nos.
you not-go-imp.h rather he-to go-inf give-imp.h

'Don't go. Rather let him go.'

3. Sentence Introducers with Amplificatory Notions

In this group we distinguish between the following three types:
Explanatory sentence introducer (24-27)
Illustrative sentence introducer (28-29)
Sentence topic announcement (30)

Figure 5 lists these introducers and states the semantic content of their context.

Remarks. The explanatory sentence introducer arthaat is used when a full proposition needs further explanation, while the other variants (25-27) are the appropriate forms when a single

Sentence Introducer	Semantic Context		
	Preceding sentence	Introduced sentence	
arthaat 'that means'	statement	explanation	(24)
"explained item" bhan-eko (caai') say-perf sp	unknown item	explanation of unknown item	(25)
bhan-daa-kheri say-ca-while			(26)
maane meaning			(27)
jastai / jasto ki 'such as'	fact	illustration of fact	(28 & 29)
topic in phrasal form	(no preceding context required)	beginning of topic development	

Figure 5. Sentence introducers with amplificatory notions.

word needs to be explained.

The illustrative introducer occurs at the beginning of the sentence if the preceding proposition needs to be illustrated (see ex 28). If a specific item of a proposition needs illustration, the illustrative introducer occurs after this item and is followed by illustrative items (see ex 29).

Some sentences are introduced by topic announcements. These may give the topic of the following sentence nucleus. More often, however, they concern the whole paragraph or discourse. Longacre (1970:788-94) points out that the pre-nuclear periphery in general has a crucial function in paragraph and discourse structure.

Examples.

24) tio paraal-ko euTaa kuniu' banaau'-chan. arthaat tio
that straw-of one straw stack make-pr,3pl that means that

paraal sab-ai jamma paar-era ek Thaau'-maa raakh-chan.
straw all-em together put-sa one place-in keep-pr,3pl

'Of that straw they make a straw stack. That means they keep that straw all together in one place.'

25) ani garaa bhan-eko caai', cheu-maa euTaa Dil
and then terrace say-perf sp edge-in one ridge

hun-cha, ani saano euTaa pharaakilo jasto Thaau' hun-cha.
be-pr,3s and small one wide alike place be-pr,3s

'To explain what a terrace is, there is a ridge at the edge
and then there is a small wide space.'

26) Damaru bhan-daa-kheri baagh-ko baccaa bujh-in-cha.
tiger cub say-ca-while tiger-of child understand-pas-pr,3s

'The young one of the tiger is called damaru.'

27) paaDo maane bhai'si-ko baccaa.
buffalo calf meaning buffalo-of child

'The young one of the buffalo is called paado.'

28) dhaan baahek aru anna-laai bhitriaau-na sajilo hun-cha,
rice excluded other grain-to harvest-in easy be-pr,3s

dhaan bhitriaau-na muskil hun-cha. jast-ai, jaba dhaan
rice harvest-inf difficult be-pr,3s such as-em when rice

paak-cha dhaan kaaT-ne tarikaa pani bhindaa-bhindai cha.
ripen-pr,3s rice cut-def method also various be,pr,3s

'The other grains, except rice, are easy to harvest, but rice
is difficult to harvest. For example, when the paddy is ripe
there are also various methods of cutting the rice.'

29) tes-maa haamro Thulo kuraa jamaraa bhan-ne cij ek thari
that-in our big thing jamara say-def thing one kind

hun-cha. tes-maa anna jasto-ki, jau, caamal, makai
be-pr,3s that-in grain such as barley rice corn

raakh-in-cha.
put-pas-pr,3s

'One of the important things of that (festival) is a thing
called jamara. Into it, grains are put such as barley, rice,
and corn.'

30) dhaan bhitriaau-ne kaam, jati dhaan rop-na sajilo
rice harvest-def work as much rice plant-inf easy

hu'-dai-na teti bhitriaau-nu pani sajilo hu'-dai-na.
be-pr,3s-neg so much harvest-inf also easy be-pr,3s-neg,3s

'As to rice harvesting--as difficult as it is to plant rice,
it is just as difficult to harvest it.'

4. Patterns of Correspondence between Sentence Introducers and Sentence Types

For the sentence introducers listed above,[2] there is a parallel list of sentence types. Figure 6 shows this pattern of correspondence between sentence introducer tagmemes and sentence types.

Sentence Introducer	Sentence Type
ani/ra 'and then, and'	coordination
tes kaaran 'for that reason'	reason
kina bhane 'because'	cause
natra bhane 'otherwise'	condition
taa pani 'even so'	concession
tara 'but'	constraint (and adversion)
baru 'rather'	inversion

Figure 6. Parallelism of sentence introducers and sentence types. The sentence introducers with temporal notions (cf. Fig. 3) also parallel the associated action participles.[3]

B. Post-Nuclear Periphery

The fillers of the post-nuclear periphery are attitude particles and tag questions.

The attitude particles are a prominent feature of Nepali and add much flavor to the communication. Exact translations are sometimes difficult. When occurring in the post-nuclear periphery, they pertain to the whole sentence. The particles ni and ta occur also on phrase level.

Figure 7 lists attitude particles, states their characteristic usage, and gives meanings where possible.

ta	occur characteristically (but not exclusively)	(31)
na	after imperatives and optatives	(31)
hai		(32)
la		
ha' ra	occur characteristically after questions	(34)
ni	occurs characteristically after statements and questions	(33)
re	may occur after any utterance and indicates that it is a reported utterance	(35)
kiaa re ke	occur after statements and indicate that the preceding statement is somewhat doubtful.	
hagi	occurs after suppositions	

Figure 7. Fillers of the post-nuclear periphery. Tag questions also occur in the post-nuclear periphery of the sentence (see example 36).

Examples.

31) ma bhan-chu, sun-a hai ta ! X bhan-nos na !
I tell-pr,1s listen-imp att att tell-imp.h att

'I will tell it; you listen!--Please tell it!'

32) aba arko coTi kuraa gar-au'laa hai !
now other time talk do-f,1pl att

'Now we will talk together another time.'

33) hu-na ta aba moTar-saaikal kaar-maa caD-ne-laai her-e
be-inf att now motor-bike car-in ride-def-to look-perc

bhan-e ta citta dukh-cha ni.
say-perc att mind hurt-pr,3s att

'If you look at those who ride motor bikes and drive cars it makes you feel bad.'

34)	?	paa'c	din-le	tapaai'-le	aaphno	gaau'-maa	ke	unnati
		five	day-with	you-ag	own	village-in	what	development

gar-na	sak-nu	hun-cha	ra.
do-inf	can-inf	aux.hon-pr	att

'What development can you accomplish in your own village in five days!'

35)	sanTos	nai	sab-ai	bhan-daa	Thulo	sukkha	ho	re.
	satisfaction	em	all-em	say-ca	great	happiness	be,pr,3s	att

'Satisfaction is the greatest happiness, they say.'

36)	io	haamro	hindu	jaati-ko	Thulo	parba	ho,	?	hoi-
	this	our	Hindu	race-of	great	festival	be,pr,3s		be,pr,3s-

na	ta.
neg	att

'This is the great festival of the Hindu race, isn't it?

C. Nucleus

1. Simple versus Complex Sentence Nuclei

The nucleus of a sentence may be simple or complex. A simple nucleus consists of one independent clause. A complex nucleus involves two or more clauses.[4]

When working with texts we may have initial difficulties establishing sentence boundaries. We notice that phonological linking and grammatical linking are noncongruent. Grammatically complete and isolable units may be linked together phonologically. The phonological sentence tends to be longer than the grammatical one.

In this paper we are primarily interested in the grammatical sentence, and we have applied the following criteria for establishing sentence boundaries: In order to consider two clauses as one sentence there has to be some kind of patterned linking between them. We have observed three types of linking:

lexical linking (conjunctions)
linking through subordination
close semantic linking factors

Lexical linking and linking through subordination of one clause are always motivated by underlying semantic factors. Clauses, if talking on the grammatical level, or propositions, if talking on the semantic level, are not linked together at random. This fact has again and again impressed us in the course of the detailed description of each sentence type. The patterning and the restrictions are much more rigid than perhaps generally assumed.

For convenience of description the constructions filling the nucleus of a sentence will also be called sentences. It is understood that a periphery may optionally accompany them.

2. Systemic Organization of Complex Sentence Nuclei[5]

In the introduction to the Philippine report Longacre (1968, Vol I:xxi) states:

> "Contrasting types on a given level (e.g. clause or sentence) do not occur simply as a list or inventory but constitute a system. There is, for example, no language found yet with a simple list of phonemes that do not constitute a system. Neither, however, should we expect to find a language with a simple list of sentence types that do not constitute a system."

The quest[6] for such a system for Nepali sentence types has not proved altogether futile. Systemic correspondences have become evident here and there. At the present stage of investigation we are not yet convinced that we have found the most adequate solution, and therefore we would like to present various approaches.

Our aim was to find a systemic tree (similar to Hale's clause tree; 1972:3) according to which the different sentence types could be classified. In a tree classification each node represents a contrastive feature. In order to show up the parallels in the system the right factors have to be chosen for the contrastive features. We attempted to choose contrastive features from different levels so that we would get form-meaning composites. Neither a purely semantic nor a purely grammatical classification seemed to be helpful for our purposes.

The scope of the classification which we are proposing is indicated by the heading of the tree structure in Figure 8: Explicit relations between paired propositions in declarative sentences.

In the tree structure of Figure 8 the following set of contrastive features is applied:

+Balance	vs	-Balance
+Positive	vs	-Positive
+Time Sequence	vs	-Time Sequence

Balance applies primarily to the grammatical level. Sentences consisting of two independent clauses are classified as +Balance; sentences containing a dependent clause as -Balance. For example, in English the sentence "He will go but you can't go with him" is balanced, while the sentence "In order to reach the oranges he had to climb to the very top of the tree" is unbalanced.

The positive feature applies primarily to the semantic level. -Positive implies that the second proposition denies the facts of the first proposition: the reasonable conclusion or consequence of the first proposition is denied or reversed in the second proposition. As an example, consider the following sentence: "Even if you walk quickly you can't reach it in time." The reasonable consequence of walking quickly is to reach, but the use of "even" signals that this will not be the case. +Positive implies that the second proposition gives positive (or neutral) support to the first proposition; that is, the second proposition supports (or supplements) the first proposition. An example for +Positive in English would be: "In this progressive world everybody is on the search for progress; everybody runs after it."

The time feature also applies primarily to the semantic level. +Time Sequence implies that the propositions do not co-occur or overlap in time. Example: "Before she went home she spent all her money on buying clothes." -Time Sequence implies that the propositions do co-occur or overlap in time. Example: "We continued eating while she was crying her head off."

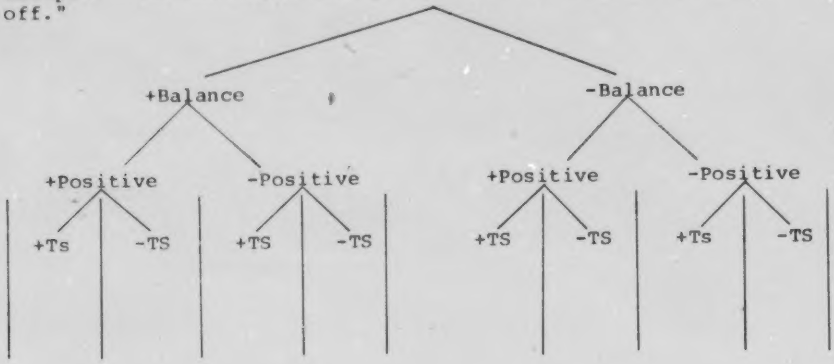


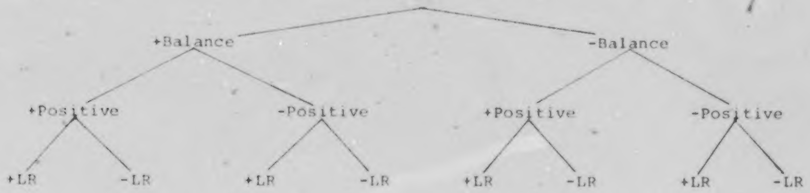
Figure 8. Explicit relations between paired propositions in declarative sentences--a tentative classification.

Classification according to this first tree was not too satisfactory. In several instances the examples of what we felt intuitively to be one sentence type were split into two groups at the Time Sequence node. The following two reason sentences illustrate this. In the first example the events are subsequent in time while in the second this is not the case.

1) "Because I ate in a restaurant yesterday, I am sick now."
2) "Because the lake was big and the water deep, the tiger drowned there."

The same thing happened with the majority of the sentence types and we therefore started looking for a feature which would be more relevant on this level. We noticed that in some sentence types there is a much tighter relationship between the propositions than in others. In the sentence "It doesn't just seem to be a nice pen, it is a nice pen" the two propositions exhibit a tight relationship. The course of thought for the second proposition is projected by the first proposition. This entails that the lexicon of the second proposition is heavily restricted by the first proposition. On the other hand, a sentence like "One gets up at five o'clock and does things in a hurry" shows no such tight relationship. This observation led us to replace the Time Sequence by the contrastive feature +Lexical Restriction (+LR) versus -Lexical Restriction (-LR).

Figure 9 displays the resulting tree structure. +LR is defined as follows: The course of thought for the second proposition is projected by the first proposition. This entails that the lexicon of the second proposition is heavily restricted by the first proposition. -LR is defined as follows: The course of thought for the second proposition is not projected by the first proposition and therefore the choice of lexicon is largely uncontrolled in the second proposition.



1	2	3	4	5	6	7	8
Alternate	Coordinate	Constraint		Temporal identification	Condition outcome	Concession	
					Exclamatory outcome	Undefined Concession	
Including/ Excluding	Causal	Inversive		Equivalence			
Paraphrase	Enumeration	Antithetical			Reason		

Figure 9. Explicit relations between paired propositions in declarative sentences--a tentative classification.

Classifying according to this tree was more encouraging. And yet, when we finished, two columns were left completely empty, namely columns four and eight. Even with elicitation and checking the residues we were not able to fill the gaps, and upon reflection it seemed logical that -Positive also entailed +Lexical Restriction. The denial or alteration of the reasonable conclusion or consequence of the first proposition necessarily entailed lexical restrictions upon the second proposition.

The fact that only three columns remained on each side suggested a three-branching split at the second node with the contrastive features +Positive, Neutral, and -Positive.

+Positive:	the second proposition gives positive support to the first.
Neutral:	the second proposition gives neutral support to the first.
-Positive:	the second proposition gives negative support to the first.

The results of this third, and up to now most satisfactory, classification are presented in Figure 10.

III. DETAILED DESCRIPTION OF COMPLEX SENTENCE TYPES

We have already mentioned that semantic prerequisites and various kinds of restrictions are quite rigid for each type. It is therefore necessary to describe each type in detail separately. The nine-box theory from Dr. K. L. Pike has proved to be very useful and adequate for the formulaic representation of the sentence types. According to this theory, each linguistic unit may be defined in a nine-fold way. It may be defined on the grammatical, semantic, and phonological levels. On each level it may also be defined as to its function, class or category, and identification. The intersection of these two parameters results in nine cells. Figure 11 illustrates this.

Boxes 1, 2, 4, and 5 seem to be most crucial in the representation of the formula for our purposes, and we normally have filled in only these four. Occasionally, where it seemed convenient, boxes 3 and 6 are added, with box 6 giving the English translation.

In many formulas box 5 is empty. We have not yet sufficiently investigated this area, but the general feeling is that it includes, among other things, semantic concord and semantic clauses.

+Balance			-Balance		
+Positive	Neutral	-Positive	+Positive	Neutral	-Positive
1. Coordination	2. Alternation	3. Constraint	10. Condition Outcome	11. Equivalence	12. Concession Outcome
ra 'and' ani 'and then' ta 'and' (surprise) (A.1)	ki ta/ ki 'or' (A.2)	tara 'but' (A.3)	-e ± bhane (Exclamatory Outcome) (B.1)	jati...teti (B.2)	-e pani (Undefined Concession) (B.3)
4. Cause	5. Including/ Excluding	6. Inversion	13. Reason	14. Temporal Identification	
kina ki 'because' (A.4)	pani...pani 'also...also' (A.5)	hoina 'is not' (A.6)	-eko huna-le/ kaaran-le (B.4)	-eko (B.5)	
7. Paraphrase (A.7)	8. Enumeration (A.8)	9. Antithesis (A.9)			

Figure 10. Explicit relations between paired propositions in declarative sentences.[7] (The numbers in parentheses refer to the sub sections of Section II where examples can be found.)

	function	class/ category	item/ identification
Grammatical	1	2	3
Semantic	4	5	6
Phonological	7	8	9

Figure 11. Pike's nine-box tagmeme.

A. Balanced Complex Nuclei

With the coordination sentence we turn to the balanced branch of the sentence tree. We observe three different ways of linking in this branch. In the first group (sentence types 1-3) conjunctions are used as balancing links. In the second group (sentence types 4-6) word categories which are primarily not conjunctions function as links. The third group (sentence types 7-9) is paratactical: the linking is exclusively semantic.

Each of the three groups has three members, namely a +Positive, a Neutral, and a -Positive type (cf. Figure 10). This allows us to set up a submatrix for the balanced branch. This submatrix is presented in Figure 12.

	Contrastive semantic features of the relations between paired propositions		
Type of linking	+Positive	Neutral	-Positive
conjunctions	Coordination (1)	Alternation (2)	Constraint (3)
pseudo-conjunctions	Cause (4)	Excluding/ Including (5)	Inversion (6)
parataxis	Paraphrase (7)	Enumeration (8)	Antithesis (9)

Figure 12. Submatrix for balanced complex nuclei.

1. Coordination Sentence

There are two types of coordination sentences, the normal coordination sentence and the surprise coordination sentence. The latter type occurs only under very specific circumstances and is described separately.

Normal coordination sentence. In each of the following detailed descriptions of complex sentence nuclei, we first give the four-box formula (boxes 1, 2, 4, and 5 of Figure 11). This is followed by remarks about the various features of the sentence type and by a number of illustrating examples. (See Appendix A for abbreviations used in formulae.)

nuc 1	indep cl	+balancing link	conj	ra (ani)	+nuc 2	indep cl
initial prop		additional prop promised		and (and then)	additional prop +Positive	

Figure 13. Four-box formula for normal coordination sentence.

Tense, aspect, and voice. Nuclei 1 and 2 are normally in the same tense, aspect, and voice. The corpus of data used for this study shows no exception to this.

Mood. Nuclei 1 and 2 are normally also in the same mood. All three moods (assertive, interrogative, and imperative) occur.

Deletions, correspondence, and sharing of tagmemes. If nuclei 1 and 2 have the same subject, the free subject is obligatorily deleted in Nucleus 2. If one of the nuclei is a bireceptive clause and the other an active clause, the referent (recipient) of the bireceptive clause is the actor of the active clause unless the second clause introduces another actor (see examples 2-4).

Alternate conjunction. Occasionally ani 'and then' is used instead of ra as conjunction in coordinate sentences (see ex. 7). However, ra is much more frequent.

Triple usage of conjunctions. Both ra and ani are also used for the coordination of noun phrases. (Coordinated noun phrases could also be analyzed as deleted propositions.) Both these conjunctions, therefore, have a triple usage. They function as sequence sentence introducers, as clause coordinators, and as noun phrase coordinators. As sentence introducer ani is most frequent, while for clause and phrase coordination, ra is the norm.

Examples.

1) ani tes din-dekhi ti dui-Taa juaai'-laai miTho miTho
and that day-from those two-cl son in law-to nice nice

khaanaa di-e ra kas-ai-laai paksapaat gar-e-nan.
food give-pst,3pl and who-em-to biased favor do-pst-neg,3pl

'From that day on they gave good food to both sons-in-law and favored no one unduly.'

2) baabu aa-eko dekh-era chorad-chori-haru-laai jiaad-ai
father come-perf see-sa son-daughter-pl-to much-em

khusi laag-io ra cheu-maa aa-era bas-e.
joy seem-pst,3s and nearness-in come-sa sit-pst,3pl

'When they saw their father coming, the children were very happy and they came and sat down near him.'

3) u daaju-ko ciThi paD-io ra ma-laai khusi laag-io.
he brother-of letter read-pst,3s and I-to joy seem-pst,3s

'He read the letter of his elder brother and I was happy.'

4) u daaju-ko ciThi paD-io ra khusi laag-io.
he brother-of letter read-pst,3s and joy seem-pst,3s

'He read the letter from his elder brother and was happy.'

5) tehi kaaran-le ta ma paa'n din phark-era ga-e' ra
that,em reason-for att I five day return-sa go-pst,1s and

pheri aa-e'.
again come-pst,1s

'For that reason I returned for five days and came back again.'

6) kas-ai-le daai' gar-ne belaa-maa git gaau'-chan ra
who-em-ag threshing do-def time-in song sing-pr,3pl and

raat-bhari kaam gar-chan.
night-full work do-pr,3pl

'At the time of threshing some sing songs and work the whole night through.'

7) pokhari-maa mero chaaiaa' dekh-in-cha ani chaaiaa' ma
pond-in my shadow see-pas-pr,3s and shadow I

jast-ai hun-cha.
alike-em be-pr,3s

'In the pond my shadow is seen and the shadow is like me.'

Surprise coordination sentence. In the surprise coordination sentence *ta* is used as balancing link. (Phonologically, *ta* is bound to nucleus 1.) This link is appropriate for coordination when the second proposition contains a surprising or unexpected event or state.

+ nuc 1	indep cl	+ balancing link	conj	ta	+ nuc 2	indep cl
initial event or state	identifies cause of surprise or describes circumstance which leads to surprise	additional surprising event or state promised		and	surprising event or state +Positive	

Figure 14. Four-box formula for surprise coordination sentence.

BEST COPY AVAILABLE

Examples.

8)

panDit	baaje-ko	khuTTaa	chaam-chin	ta,
teacher	grandfather-of	leg	touch-pr,3s,fe	and (surprise)

du-ai	khuTTaa-maa	ciplo	ghas-i-sak-eko	rah-e-cha!
two-em	leg-on	slippery	rub-v-finish-perf	remain-perc-pr,3s

'She touches the legs of the grandfather and there--both legs are already slippery! (from rubbing in oil).'

9)

bihaana	uTh-era	baabu-laai	her-cha	ta,
morning	get up-sa	father-to	look-pr,3s	and (surprise)

baabu	ta	mar-i-raakh-eko!
father	att	die-v-keep-perf

'In the morning he gets up and looks, and there--the father has died!'

10)

ghara	ga-era	bhaat	khaan-chu	ta,	ekdam	ciso!
home	go-sa	cooked rice	eat-pr,1s	and (surprise)	very	cold

'Having gone home, I eat rice and there--it's completely cold!'

2. Alternation Sentence

nuc 1	indep cl i indep cl a
+ initial prop	

balancing link	conj	ki ki ta
+ alternate prop promised		or either... or

nuc 2	indep cl i minus shared elements indep cl a minus shared elements
+ alternate prop Neutral	

Figure 15. Four-box formula for alternation sentence.
indep cl i = independent clause in interrogative mood.
indep cl a = independent clause in assertive mood.
For alternation in interrogative mood, the first line of the items in square brackets has to be chosen; for assertive mood, the second.

Alternated parts and obligatory deletion of shared elements. We note that only some part or aspect of the initial proposition is alternated in the second proposition, never the whole proposition. The remaining parts of the initial proposition apply also to the alternate proposition. The examples show that these shared elements are obligatorily deleted in the alternate proposition except for the predicate, for which deletion is optional. (Compare example 11 with example 12.) The following states both shared and alternated tagmemes for examples 11-13 and 17, 18.

example	shared elements	alternated parts
11)	adjunct of time, predicate	subject
12)	subject, predicate	complement
13)	adjunct of time, subject	object, predicate
17)	complement	subject
18)	object, predicate	adjunct of location

Mood. In alternation sentences the interrogative mood is most frequent, but the initial question does not contain a direct question word such as *kaa'* 'where,' *kina* 'why,' etc. Imperative mood is rare in usage.

Tense, aspect, and negation. These are the same in both propositions unless they are the features under alternation. In the case of a positive-negative alternation the positive proposition has to precede the negative.

Deletion of nucleus 2. The alternate proposition may be deleted if the utterance is in the interrogative. The alternate conjunction *ki* then signals some hesitation on the part of the interrogator and makes the question less direct. Such questions may not contain a direct question word either.

Free variant for assertive alternation. This variant form uses the balancing link twice. The shared elements (except the predicate) precede the alternatives (non-shared elements) and both alternatives are preceded by the link *ki*. For illustrations of this variant see examples 14-16.

Examples for assertive mood.

11) bhare ma aau'-chu *ki* *ta* tapaai' aau-nos.
later I come-pr,1s or you come-imp.h

'Later I will come or else you should come.'

12) baaTo laamo cha *ki* *ta* Dar-laag-do.
road long be,pr,3s or fear-seem-a

'The road is either long or dangerous.'

BEST COPY AVAILABLE

13) bholi ma makai goD-chu ki ta ghaa's kaaT-chu.
tomorrow I corn weed-pr,1s or grass cut-pr,1s

'Tomorrow I will either weed the corn or else I will cut grass.'

+ shared elements	non-predicate	+ balancing link 1	conj	ki	+ non-shared nuc 1	greater predicate
shared propositional elements		1st alternate element promised		or	prop of first alternate	

+ balancing link 2	conj	ki	+ non-shared nuc 2	greater predicate
2nd alternate element promised		or	prop of second alternate	

Figure 16. Four-box formula for variant assertive alternation sentence.

Examples for variant form.

14) bhare, ki ma aau'-chu, ki tapaai' aau-nos.
later or I come-pr,1s or you come-imp.h

'Later I will come or else you should come.'

15) baaTo, ki laamo cha ki Dar-laag-do.
road or long be,pr,3s or fear-seem-a

'The road is either long or dangerous.'

16) es paali-ko hiu'd ma, ki kaaThmaanDu-maa bitaau'-chu,
this time-of winter I or Kathmandu-in spend-pr,1s

ki gaau'-maa ga-era.
or village-in go-sa

'This time I will spend the winter either in Kathmandu, or else in the village.'

Examples for interrogative mood.

17) ? timi raamro ki ma raamro.
you nice or I nice

'Who is nicer, you or I?'

18) ? es paali-ko hiu'd kaaThmaanDu-maa bitaau-nu hun-cha
this time-of winter Kathmandu-in spend-inf aux.h-pr

ki gaau'-maa ga-era.
or village-in go-sa

'Are you going to spend this winter in Kathmandu or are you going to go to the village?'

3. Constraint Sentence

nuc 1	indep cl	balancing link	conj	tara	nuc 2	indep cl
+		+			+	
initial circumstance		predicts constraint or adversion on initial circumstance		but	constraining or adversive comment on initial circumstance -Positive	

Figure 17. Four-box formula for constraint sentence.

Adversion and constraint. The adversion is affirmative versus negative; that is, one statement is affirmative, the other negative (see ex 19-22). In sentences 23, 24, and 25 we do not have direct positive-negative adversion, but nucleus 2 expresses a constraint on the initial circumstance. In these examples both nuclei are positive, but we can detect a covert negative in the second nucleus. These covert negatives are added in brackets in the examples. They do not need to be expressed.

Mood. Interrogative mood has not been observed in adversion and constraint sentences.

Tense and aspect. No significant restrictions have been observed for tense and aspect.

Deletion of shared tagmemes. Any tagmeme of nucleus 1 applies also to nucleus 2, except those which are excluded by the constraint or adversion. Shared tagmemes are obligatorily deleted in nucleus 2, except the predicate which can not be deleted (see ex 24).

In the given examples the following tagmemes of nucleus 1 apply also to nucleus 2:

19) Adj of location: tiaa'
20) Subject: ma
21) Subject: ma
22) Subject: ma Object: ciaa
23) All parts adversed
24) Subject: tio kharaaio
25) Subject: (no free form, marked only in the verb endings)

Partial overlap of sentence types. The constraint sentence overlaps somewhat with the antithetical sentence since in the antithetical sentence the conjunction tara may be used optionally. In the constraint sentence, however, tara may not be deleted. Furthermore, the paratactical construction in the antithetical sentence has to meet very strict requirements which do not apply to the constraint sentence. Therefore, constraint and antithetical sentences are described as two distinct types (cf. section III. A.9).

Double function of conjunction. The conjunction tara is also used as constraint sentence introducer. Generally it is quite unambiguous in which function it occurs. Only in rare cases is there ambiguity as to whether it introduces a sentence or combines two clauses. Sentences 23 and 25 might be analyzed as two sentences. (For further discussion of this problem, see footnote 2.)

Examples.

19) tiaa' griasti ta hun-cha tara kheti hu'-dai-na.
there settling att be-pr,3s but agriculture be-pr-neg,3s

'It is possible to settle there but there isn't any agriculture.'

20) ma jaa-na ta jaan-the' tara phursat-ai chai-na.
I go-inf att go-pst.r,1s but leisure-em be,pr-neg,3s

'I would have gone but I don't have any leisure time.'

21) ma iskul-maa ga-era paD-dai-chu tara jaa'c din-na.
I school-in go-sa study-prog-pr,1s but exam give-pr,neg,1s

'I go to school and learn but I won't take the examination.'

22) aile ma ciaa khaan-na tara bhare khaan-chu.
now I tea eat-pr,1s,neg but later eat-pr,1s

'Now I won't drink tea but later I will.'

23) ma git gaau-na sak-chu, tara tapaai'-le baajaa
I song sing-inf can-pr,1s but you-ag instrument

bajaau-nu par-cha (natra ma gaau'-di-na.)
play-inf must-pr,3s (otherwise I sing-pr,1s-neg)

'I can sing but you must play the instrument. (Otherwise
I won't sing.)'

24) tio kharaaio saano thi-o tara dher-ai buddhi-maani
that rabbit small be,pst.r-3s but much-em wise-?

thi-o. (murkhia thi-e-na).
be,pst.r-3s (foolish be,pst.r-3s-neg)

'That rabbit was small but it was very wise. (It wasn't
foolish.)'

25) ek paTak ga-e' jaa-na ta, tara paa'n din maatr-ai
one time go-pst,1s go-inf att but five day only-em

bas-e'. (dher-ai bas-i-na)
stay-pst,1s (much-em stay-pst,1s-neg)

'I did go once but I stayed only five days. (I didn't stay
long.)'

4. Cause Sentence

+nuc 1	indep cl	+balancing link	conj	kina-ki	+nuc 2	indep cl
statement of effect		statement of cause promised		because	statement of cause +Positive	

Figure 18. Four-box formula for cause sentence.

Alternate link. kina-ki may be replaced by kina bhan-e 'if saying why.' This phrase functions also as a sentence introducer. It seems to have a double function similar to some conjunctions which occur also as sentence introducers and as sentence medial links, for example tara 'but' (see III. A.3), ani 'and then,' and ra 'and' (see III. A.1).

Examples.

26) ma eso gar-chu, kina-ki timi-laai prem gar-chu.
I this way do-pr,1s because you-to love do-pr,1s

'I do this because I love you.'

27) bhaat tataa-era khaa-u, kina-ki ekdam ciso cha.
rice heat up-sa eat-imp because completely cold be,pr,3s

'You must heat the rice up for eating, because it is completely
cold.'

BEST COPY AVAILABLE

28)

tapaai'	ek	din-maa	laamtaang	pug-nu	hun-na,	kina-ki
you	one	day-in	Lamtang	reach-inf	aux.h-neg,pr	because

io	Taaro	cha.
this	far	be,pr,3s

'You won't reach Lamtang in one day, because it is far.'

29)

aru	maanis	ta	tiaa'	bas-dai-nan,	kina	bhane	jaaDo
other	people	att	there	live-pr-neg,3s	because		cold

cha,	jiaad-ai.
be,pr,3s	very-em

'No other people are living there, because it is cold there, very cold.'

5. Excluding/Including Sentence

The combination of clauses in these two sentence types is based on the same tactics. The including type is built on positive propositions while the excluding type requires negative propositions. They are so parallel that we have placed them in the same cell of the sentence matrix. However, the excluding type has an alternate form which does not apply to the including type.

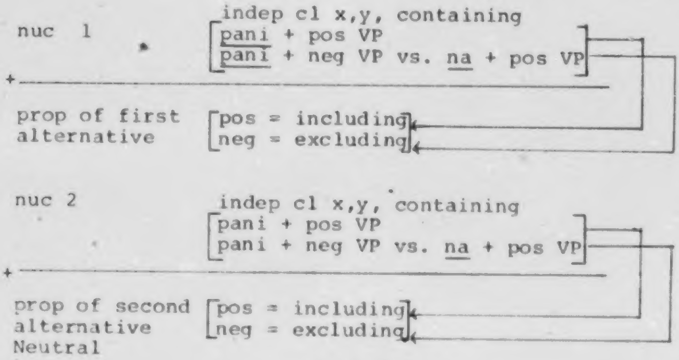

nuc 1
indep cl x,y, containing
pani + pos VP
pani + neg VP vs. na + pos VP
+
prop of first alternative
pos = including
neg = excluding
nuc 2
indep cl x,y, containing
pani + pos VP
pani + neg VP vs. na + pos VP
+
prop of second alternative Neutral
pos = including
neg = excluding

Figure 19. Four-box formula for excluding/including sentence.
x = concord in clause type
y = concord in tense, mood, and aspect

The links. pani 'also' occurs in both clauses after the excluded or included tagmemes.

Restrictions in combining clause types. Only clauses of the same type seem to combine in this sentence. The analyzed corpus shows no exceptions.

Shared tagmemes and deletions. Unless they are being excluded or included, the following are identical for both clauses of the excluding/including sentence: tense, aspect, and mood; the subject in active and stative clauses; the recipient in receptive clauses; and peripheral tagmemes. When they are thus shared, the subject, recipient, and peripheral tagmemes are deleted in the second clause. If the predicates are identical, the predicate of the second proposition is *not* deleted when *pani* is used for linking but it is deleted when excluding particles are used (see "Alternate linking" below).

Alternate linking for the excluding type. Both propositions, instead of being negated in the verb phrase, may be negated by the particles *na* or *na ta* (*ta* is optional). These must occur in both propositions, immediately before the excluded parts. They exclude the use of *pani* and negative suffixes in the verb phrase, and the predicate of the second proposition is obligatorily deleted if it is identical with the first one (see ex 34). The use of the exclusive particles instead of *pani* + negation seems to be a more literary form.

Examples--excluding sentences.

30) tio sut-na *pani* sak-dai-na, uTh-era hi'D-na *pani*
that sleep-inf *also* can-pr,3s-neg get up-sa walk-inf *also*

sak-dai-na.
can-pr,3s-neg

'He neither can sleep nor can he get up and walk around.'

31) tala-tira tel-laai jhar-na *pani* chai-na, bas-na
down-wards he-to descend-inf *also* be,pr,3s-neg sit-inf

pani chai-na.
also be,3s,pr-neg

'Neither can he descend nor can he stay where he is.'

32) aile *na* ghaam laag-cha *na* paani par-cha.
now *neg.p* sun shine-pr,3s *neg.p* water fall-pr,3s

'Now neither the sun is shining nor is it raining.'

33) tio cij *na* kin-na nai sak-in-cha, *na ta* bec-na.
that thing *neg.p* buy-inf em can-pas-pr,3s *neg.p* sell-inf

'Neither can this thing be bought nor can it be sold.'

34) io kalam *na ta* timro ho *na ta* mero.
this pen *neg.p* yours be,pr,3s *neg.p* mine

'This pen is neither yours nor mine.'

Examples--including sentences.

35) es paTak-ko jaa'c-maa raam pani phel bha-io siaam pani
this time-of exam-in Ram also fail be-pst,3s Siam also

phel bha-io.
fail be-pst,3s

'This time both Ram and Siam failed in the examination.'

36) gata saal pani paani par-eko thi-o, io saal pani
last year also water fall-perf aux,pst.r-3s this year also

par-io.
fall-pst,3s

'Last year it was raining and this year it rained too.'

37) raamro-sa'ga paas bha-eko-le maasTar-le pani maaiaa gar-e,
good-with pass be-perf-for master-ag also love do-pst,3pl

bidhiaarti-le pani raamro-sa'ga paD-io.
student-ag also good-with study-pst,3s

'Because he had passed the teacher loved the student and the student studied well, too.'

38) baabu-le pani bhaari-baaTa nun-ko Dhikaa jhik-era choraa-
father-ag also load-from salt-of lump pull out-sa son-

haru-laai misri bhan-era di-o, uni-haru-le pani khaa-na
pl-to sugar say-sa give-pst,3s he-pl-ag also eat-inf

thaal-e.
begin-pst,3pl

'Telling the sons that it was sugar, the father took a salt lump out of his load and gave it to them and they began to eat it.'

6. Inversion Sentence

+ nuc 1	anaphoric indep cl	+ inversion formula	stative VP	hoi-na	+ nuc 2	indep cl
quoted prop		revocation of some aspect of quoted prop		is not	inversed prop -Positive	

Figure 20. Four-box formula for inversion sentence.

Inversion. Nucleus 1 contains a quoted utterance in which one aspect is not pleasing to the present speaker. This clause is anaphoric in that it contains anaphoric references to the previous utterance of which only as much is repeated as is necessary to bring out the displeasing aspect. (See ex 39, where we have given the preceding utterance.) Anaphoric deletion of the predicate is also possible in such clauses (see ex 40). In nucleus 2 the displeasing aspect is inversed to whatever is pleasing to the present speaker.

Examples.

39)

aba	pachi	khaa-u'laa.	X	khaa-u'laa	hoi-na,
now	afterwards	eat-f,1s		eat-f,1s	be,pr-neg,3s

tapaai'-le	khaa-nu	par-cha.
you-ag	eat-inf	must-pr,3s

'I might eat it later. - Don't say might eat, you must eat it.'

40)

Thulo	bha-e-pachi	hoi-na,	aile-nai	tio	baani
big	be-perc-after	be,pr-neg,3s	now-em	that	habit

bas-aal-nu	par-cha.
sit-c-inf	must-pr,3s

'Not after you have become big; right now this habit has to be acquired.'

41)

io	kalam	raamro	jasto	cha	hoi-na	raamro	cha.
this	pen	nice	like	be,pr,3s	be,pr-neg,3s	nice	be,pr,3s

'It doesn't just seem to be a nice pen, it is a nice pen.'

7. Paraphrase Sentence

With the paraphrase sentence we turn to the third group of balanced sentences, the paratactical group (cf Figure 12). The paraphrase sentence is the +Positive member of this group.

nuc 1	indep cl	nuc 2	indep cl, anaphoric
+		+	
proposition		paraphrase of proposition, specifying +Positive	

Figure 21. Four-box formula for paraphrase sentence.

Remarks. Nucleus 2 restates some aspect of the initial proposition in a different way. Such paraphrasing emphasizes the restated parts, adds details, and amplifies the theme of the initial proposition. Paraphrases of the proposition are independent insofar as the predicate, if it is restated, uses independent verb suffixes, but the clauses of nucleus 2 show heavy deletions. They contain anaphoric references to the initial proposition.

Examples.

42) io pragatisil sansaar-maa sab-ai maanis-haru unnati-ko
this progressive world-in all-em people-pl progress-of

khoji gar-dai-chan, unnati-tira dhaau'-dai-chan.
search do-prog-pr,3pl progress-towards run-prog-pr,3pl

'In this progressive world everybody is on the search for progress, everybody runs after it.'

43) malti-gairaa euTaa saano gaau' cha, euTaa asikcit
Malti-low place one small village be,pr,3s one uneducated

gaau' bhan-u'.
village say-opt,1s

'Maltigaira is a small village, an uneducated village we might say.'

44) ? ke aile us-mai di-nu hun-cha, pus-mai din-nu
qm now that-in,em give-inf aux.h-pr,3s Pus-in,em give-inf

hun-cha, jaa'c.
aux.h-pr,3s test

'Are you going to take the test in that month, in the month of Pus?'

8. Enumeration Sentence

The enumeration sentence is characterized by fusion of a series of clauses into one semantic unit. A minimum of two clauses may be involved in the fusion, but often three or more clauses are involved.

For the enumeration of actions we can give the following formula: (see ex 45-47).

nuc r	indep cl r	link	conj	ra/ ani	final nuc	indep cl
+		+			+	
enumeration propositions		final prop promised		and/ and then	final prop Neutral	

Figure 22. Four-box formula for enumeration sentence with enumerated actions.

Remarks. The first nucleus is repeated any number of times. Non-initial clauses show heavy deletions--normally only the factors under enumeration are restated in the subsequent clauses.

Enumeration of non-action elements. When tagmemes other than the predicate are enumerated, there are repeated tagmemes for the enumerated parts (see ex 48 and 49).

Examples.

45)

eti	dhaan	bec-ne,	eti	aaphu-le	khaa-ne.
this much	rice	sell-def	this much	self-ag	eat-def

'This much rice we will sell, this much we will eat ourselves.'

46)

saat	baje	uTh-io,	hataar	hataar	gar-io,	kaam-maa
seven	o'clock	rice-pst,3s	hurry	hurry	do-pst,3s	work-in

ga-io.
go-pst,3s

'I usually get up at seven o'clock, do things in a hurry, and go to work.'

47)

ani	mukh	dhu-na	ga-e',	haat	dho-e',	eso	uso
and then	face	wash-inf	go-pst,1s	hand	wash-pst,1s	this	that

gar-daa	gar-daa	saat	baj-i-haal-cha,	ani	chiTo
do-sa	do-sa	seven	strike-v-put-pr,3s	and then	quickly

iaa'	aa-eko.
here	come-perf

'And then I went to wash face and hands, and doing this and that, it was suddenly seven o'clock and I came here quickly.'

48)

teraai-maa	kas-ai-le	boT-ko	aadhaa-maa	pani	kaaT-chan,
Terai-in	some-em-ag	plant-of	half-in	also	cut-pr,3pl

kas-ai-le	Tuppaa-maa	ra	kas-ai-le	pheda-maa.
some-em-ag	top-in	and	some-em-ag	bottom-in

'In the Terai some cut in the middle of the plant, some at the top, and some at the bottom.'

49)

mero	gaau'-ko	naau'	caai'	kaa'ku	ho,	jillaa	solo-
my	village-of	name	sp	Kaku	be,pr,3s	district	Solo-

khumbu,	sagarmaathaa	ancal.
Khumbu	Mt. Everest	zone

'The name of my village is Kaku; the district, Solu-Khumbu; the zone is Sagarmatha.

9. Antithesis Sentence

nuc 1	indep cl x	nuc 2	indep cl x
+ thesis		+ antithesis -Positive	

Figure 23. Four-box formula for antithesis sentence.
x = concord in tense and mood.

Remarks. The thesis sets the frame for the sentence. In the antithesis one item is contrasted: the data checked always shows one and only one item contrasted. This condition is apparently quite rigid for the antithetical sentence, distinguishing it from the constraint sentence type which uses the conjunction *tara*. In the given examples the following items are contrasted:

50)	raai-limbu negative	'Rai-Limbu'	vs	chetri-baun positive	'Chetri-Brahman'
51)	arthok positive	'other things'		sanTos negative	'satisfaction'
52)	bidhiaarthi positive	'student'		maasTar negative	'teacher'
53)	aru anna	'other grains'		dhaan	'rice'
	sajilo	'easy'		muskil	'difficult'
54)	baaira	'outside'		bhitra	'inside'
	tiaa'	'there'		iaa'	'here'
55)	euTaa juaai'	'one son-in-law'		arko juaai'	'the other son-in-law'
	miTho	'nice'		na-miTho	'bad'
				replaced by: *testo thiena* 'it wasn't this way'	

Shared tagmemes and deletions. Excluding the tagmemes which are contrasted the other tagmemes of the thesis apply also to the antithesis. They are obligatorily deleted in the antithesis except the predicate for which deletion is optional (cf. ex 54 and 55).

Replacement of the antithesis. In example 55 the antithesis is replaced by the phrase *testo thiena* 'it wasn't that way.' Because of the rigid semantic conditions of this sentence type, we know that this stands for *na-miTho khaanaa di-o* 'she gave bad food.'

Tense and mood. Both nuclei have the same tense and mood unless these are being contrasted. All moods occur.

Overlap of sentence types. We have already pointed out that there is a partial overlap between this sentence type and the constraint sentence (cf. section III. A.3). This is so if the antithetical sentence uses the adversive conjunction *tara*. However, this optional usage is not as acceptable stylistically. If the conditions for an antithetical sentence are met, it is better to omit *tara*.

Preferred sentence introducer. We notice that antithetical sentences are frequently introduced by *tara* 'but' (see ex 50). Initially we thought these examples were constraint sentences in which the conjunction was permuted to the beginning and in which it had some type of double function. This proved not to be the case since these sentences are complete and comprehensible when *tara* is omitted.

Examples.

50) tara tio gaau' raai-limbu-ko gaau' thi-e-na,
but that village Rai-Limbu-of village be,pst.r-3s-neg,3s

chetri-baun-ko gaau' thi-o.
Chetri-Brahman-of village be,pst.r-3s

'But this village was not a Rai-Limbu village, it was a Chetri-Brahman village.'

51) tapaai' caai' arthok arthok sik-nu hun-cha,
you sp other thing other thing learn-inf be-pr,3s

sanTos gar-na caai' sik-tai sik-nu hun-na.
satisfaction do-inf sp learn-em learn-inf be-pr,3s,neg

'You learn more and more things, but you never learn to be satisfied.'

52) tes kaaran aba haami caai' bidhiaarthi nai ban-au'
that reason now we sp student em be made-opt,1pl

maasTar na-ban-au'.
teacher neg-be made-opt,1pl

'For this reason let's now be students, let's not become teachers.'

53) makai, kodo, phaapar, athabaa dhaan baahek aru anna-laai
corn millet buckwheat or rice excluded other grain-to

bhitriaau-na sajilo hun-cha, dhaan bhitriaau-nu muskil
harvest-inf easy be-pr,3s rice harvest-inf difficult

hun-cha.
be-pr,3s

'Corn, millet, buckwheat or any other grains except rice are easy to harvest, but rice is difficult to harvest.'

54) tiaa'-ko jaaDo baaira maatr-ai hun-cha, iaa'-ko jaaDo ta
there-of cold outside only-em be-pr,3s here-of cold att

bhitra muTu-samma.
inside heart-up to

'There the cold is only outside, but here it penetrates
inside, up to the heart.'

55) tara saasuraa-le euTaa juaai'-laai miTh-ai miTho
but mother in law-ag one son in law-to nice-em nice

khaanaa di-o, arko juaai-laai caai testo
food give-pst,3s other son in law-to sp that way

thi-e-na.
be,pst.r-3s-neg,3s

'But to one son-in-law the mother-in-law gave very, very nice
food, but the other she didn't treat the same way.'

B. Unbalanced Complex Nuclei

With the condition-outcome sentences, we turn to the unbalanced branch of the sentence tree (see Figure 10). This branch is characterized by the use of dependent forms in the first proposition which makes the sentence grammatically unbalanced. Sentence types 10, 12, 13, and 14 have dependent verb endings in the first clause; in sentence type 11 (equivalence) the verb forms are independent in both clauses, but the use of the undefined particles in one clause makes it a dependent unit.

On the grammatical level we have called the dependent unit of the unbalanced sentence margin and the independent unit nucleus.

The members of the first group (sentence types 10-12) show some structural relation; the condition-outcome sentence and the concession-outcome sentence use similar verb forms in the dependent clause, and the equivalence sentence and the concession-outcome sentence both use the undefined particles. However, these three types differ radically on the semantic level in their relations between the propositions: The condition-outcome sentence is +Positive, the equivalence sentence is Neutral, and the concession-outcome sentence is -Positive. This is especially significant for the condition-outcome and the concession-outcome sentences. These two types show many structural similarities, but they are distinct through the semantic feature +Positive versus -Positive. The concession-outcome sentence is the negative counterpart of the condition-outcome sentence.

The second group (sentence types 13 and 14) has only two members. These also show some structural similarity in that for both types the perfective participle occurs in the dependent clause.

1. Condition-Outcome Sentence

The condition-outcome sentence has two subtypes: the simple condition-outcome sentence and the exclamatory-outcome sentence. In both types the nucleus is preceded by a conditional margin.

+ margin	dep cl c 1 / dep cl c 2 rhetorical question + bhan-e	+ nucleus	indep cl
condition exclamatory condition		outcome exclamatory outcome +Positive	

Figure 24. Four-box formula for condition-outcome sentence. For condition-outcome sentence choose the first line in the square brackets; for exclamatory outcome sentence, lines two, three, etc.

dep cl c 1 = clausal[8] + perceptive participle -e ± bhan-e

c 2 = clause with restricted tense + bhan-e

Remarks concerning the condition-outcome sentence. The conditional clause of the simple condition-outcome sentence has a dependent predicate since the perceptive participle ending -e occurs on the last stem of the verb phrase. For a general impersonal and tenseless condition only the perceptive participle of the main verb has to occur. Optionally it may be followed by bhan-e which is the perceptive participle of the verb 'to say.' For a personal and tense specific condition, the main verb takes person and tense suffixes and must be followed by the perceptive participle bhan-e (see ex 59-61).

Tense. The conditional margin may be in the past perfect, past aorist, present, or optative. The co-occurrence of tenses is restricted as follows:

margin	nucleus
past perfect	past remote conditional tense (-ne thio.)
past aorist	past aorist present future
present	present future
optative	present

Past perfect is used for conditions which apply to the past,

past aorist for conditions which are punctual in aspect, and present for conditions which are stative in aspect.

Mood. The mood of the conditional sentence is determined by the base; the conditional margin is without mood.

Examples.

56) saaikal-maa aa-e jhan aapat hun-cha.
bicycle-on come-perc more difficulty be-pr,3s

'If you come by bicycle it is even less convenient.'

57) moTar-saaikal kaar-maa caD-ne-l-ai her-e bhan-e ta
motor-bike car-in ride-def-to look-perc say-perc att

citta dukh-cha ni.
mind hurt-pr,3s att

'If you look at those who ride motor-bikes and drive cars it makes you feel bad.'

58) aaja na-bha-e bholi pani hun-cha.
today neg-be-perc tomorrow also be-pr,3s

'If it is not convenient today, tomorrow is all right too.'

59) tapaai'-le eso bhan-nu bha-io bhan-e ma-laai
you-ag this way say-inf aux.h,pst-3s say-perc I-to

citta bujh-cha.
mind understand-pr,3s

'If you say it this way, I agree.'

60) jadi paani suk-io bhan-e tiaa' caai' khet-ko tio
if water dry-pst,3s say-perc there sp field-of that

phasal raamro hu-na sak-dai-na, pachi.
crops good be-inf can-pr,3s-neg afterwards

'If the water dries out, the crops of that field will not yield well afterwards.'

61) daai' gar-daa saanu khet athabaa thor-ai dhaan
threshing do-ca small field or little-em rice

cha bhan-e maanis-le maatr-ai gar-chan.
be,pr,3s say-perc man-ag only-em do-pr,3pl

'When they are threshing, if there is a small field or if there is only a small amount of rice, only people do it.'

Remarks concerning the exclamatory outcome sentence. The exclamatory condition consists of a question which is marked as rhetorical by the perceptive participle *bhan-e* which follows immediately. Such a question contains a *direct* question word. The outcome is a fact or event which surprised the speaker or with which he wants to surprise the hearer. It is a device to focus on a surprising fact or event. This sentence is quite unique and it is a favored type in colloquial story telling.

Tense. In the margin, only the perceptive past tense has been observed. In the nucleus, perceptive past and past aorist occur.

Examples. (First sentence gives the context.)

62) ek din ek janaa maanis himaal-ko cheu-maa
one day one person man snow mountain-of nearness-in

ga-e-cha. us-laai kasto jaaDo bha-e-cha bhan-e,
go-perc-pr,3s he-to how cold be-perc-pr,3s say-perc

ek chin pachi mar-e-cha.
one moment after die-perc-pr,3s

'One day somebody went near the snow mountains. He got so cold that after a moment he died!' (How cold he became!-- After a moment he died!)

63) tini-haru kasto gar-e-chan bhan-e, Dori lagaa-era
he-pl how do-perc-pr,3pl say-perc rope fix-sa

maathi caD-e-chan.
up climb-perc-pr,3pl

'And how do you think they did it? They fixed a rope and climbed up on it!'

64) io haat-khuTTaa-laai caai' ni kasto ris uTh-e-cha
this hand-foot-to sp att how anger rise-perc-pr,3s

bhan-e ek din tini-haru-le sallaa gar-e-chan.
say-perc one day he-pl-ag counsel do-perc-pr,3pl

'Think how angry the hands and feet got! So much so that one day they held counsel!'

2. Equivalence Sentence

margin	dep cl, undefined x	nucleus	indep cl demonstrative x
+		+	
undefined modal prop		equivalence prop, defining modal prop Neutral	

Figure 25. Four-box formula for equivalence sentence. x signals concord in undefined and demonstrative particles.

Remarks. The dependent clause of the equivalence sentence has independent verb phrase form; however, it is made dependent by the undefined pronoun or particle which occurs with it. The independent clause of the nucleus contains a demonstrative pronoun or particle which corresponds in value to the undefined form occurring in the margin (see Figure 26 for the chart of corresponding forms). Through this correspondence the equivalence relationship is established; that is, one aspect of the undefined modal proposition is defined as being equivalent to one aspect of the nuclear proposition.

semantic equivalence	undefined forms	demonstrative forms	remarks
quantity	jati	teti/ uti	
location	jataa	tetaa/ utaa	*jataa* may be replaced by *kataa*
	jaa'	tiaa'	*jaa'* may be replaced by *kaa'*
	jas-maa	tes-maa	
time	jaba	(taba)	*taba* is frequently deleted
quality	jasto	testo	
manner	jasari	tesari	
person	jo	tio	
thing	je	tio	

Figure 26. Chart of corresponding pronouns and particles.

Alternate forms. Occasionally the interrogative form of the pronoun is used instead of the relative form. This is a free variation (cf. examples 67 and 68).

Sequence. Margin + nucleus is the normal sequence, but the order may be reversed to nucleus + margin (see ex 66).

Deletion. For temporal equivalence, the demonstrative pronoun *taba* is optional (see ex 69).

Examples.

65) u *jasto* Dar-laag-do *jasto* Thulo thi-o, chaaiaa'
he as much fear-seem-v as much big be,pst.r-3s shadow

pani *test-ai* thi-o.
also that much-em be,pst.r-3s

'The shadow was as dangerous and as big as he was himself.'

66) haamro pahaaDi chetra-maa dhaan rop-na-ko laagi teti
our hilly part-in paddy plant-inf-of for so much

sajilo chai-na taraai-maa jati sajilo cha.
easy be-pr,neg,3s Terai-in as much easy be,pr,3s

'In our hilly part it is not as easy to plant paddy as it is in the Terai.'

67) arkaa-ko nun-tiun khaa-e-pachi, jataa jataa
others-of salt-soup eat-perc-after where,undef where,undef

lagaa-i-din-cha utaa ut-ai jaa-nu par-cha
put-v-give-pr,3s there there-em go-inf must-pr,3s

'After having eaten the bread of others, you have to go whereever they put you.'

68) sarkaar-le kataa-paTTi khataa-i-din-cha, ut-ai
government-ag where-side appoint-v-give-pr,3s there-em

jaa-nu par-io ni.
go-inf must-pst,3s att

'You have to go wherever the government appoints you to go.'

69) jaba ma biraami hun-chu (taba) timi-le madat di-nu
when I sick be-pr,1s then you-ag help give-inf

par-cha.
must-pr,3s

'When I will be sick you will have to help me.'

3. Concession-Outcome Sentence

The concession-outcome sentence is the -Positive counterpart of the +Positive condition-outcome sentence. It also has two subtypes, namely the simple concession-outcome sentence and the undefined concession-outcome sentence.

margin	dep cl c l dep cl c l, undef	+ pani/ taa pani	+	nucleus	indep cl
concession undefined concession				outcome -Positive	

Figure 27. Four-box formula for concession-outcome sentence. For concession-outcome sentence choose the first line in the square brackets, and for undefined concession-outcome sentence, the second and third.

Remarks. In the concessive margin, the predicate is in the dependent perceptive participle form (see Figure 24) and is immediately followed by the concessive particle pani. In this sentence type bhan-e is not used. It is obligatorily absent. pani and taa-pani are alternate forms. For the undefined concession-outcome sentence, the first tagmeme of the dependent clause must be an undefined pronoun or particle (see Figure 26). In this sentence type the undefined temporal particle is jaile, not jaba.

Examples for concession-outcome sentence.

70) chiTTo hi'D-e pani timi pug-na sak-dai-nau.
quickly walk-perc also you reach-inf can-pr-neg,2s

'Even if you walk quickly you can't get there.'

71) hi'ud mainaa-maa ghaam laag-e pani jaaDo hun-cha.
winter month-in sun shine-perc also cold be-pr,3s

'During the winter months it is cold even when the sun shines.'

72) hin-na-laai Taaim nikai laag-e pani aba kosis
walk-pur-for time quite a lot take-perc also now effort

gar-nu par-io!
do-inf must-pst,3s

'Although it takes quite a lot of time to walk, we must make the effort now.'

73) kaam bha-e pani tapaai' Thik samai-maa aau-nu par-
work be,pst-perc also you right time-in come-inf must-

cha.
pr,3s

'Even if you have work to do you must come on time!'

Examples for undefined concession-outcome sentence.

74) je bha-e pani jaa-na ta jaa-nu bha-e-cha ni.
what,undef be-perc also go-inf att go-inf aux.h-perc-pr att

'Whatever may be, you did go.' (Regardless of the details you did go.)

75) jati di-e pani hun-cha.
as much give-perc also be-pr,3s

'You may give as much as you like.'

76) jasari khaa-e pani hun-cha.
how,undef eat-perc also be-pr,3s

'You may eat it however you like.'

4. Reason Sentence

margin	dep cl r
+ prop of reason	

nucleus	indep cl
+ prop of outcome +Positive	

Figure 28. Four-box formula for reason sentence.

Remarks. The dependent clause of the margin is formed as follows:

dep cl r = clausal + *-ne* *hu-na-le*, occurs if the reason is imperfective in aspect.
or
-eko *(hu-na)-le* occurs if the reason is perfective in aspect.

The use of *hu-na* is obligatory in the first case but optional in the second.

Tense and mood. Tense and mood of the sentence are determined by the nucleus of the sentence, since the reasonal margin is without either.

Deletions. If margin and nucleus have the same subject, the free form of it is obligatorily deleted in one of the propositions (see examples 79 and 80).

Alternate forms. The reasonal sentence combines the propositions of reason and outcome in one sentence. The same two propositions are expressed in two sentences if the reasonal sentence introducer *tes kaaran-le* is used. Sentence 79, for example, can be transformed as follows:

hijo	mai-le	resTuraa'-maa	khaa-e'.	tes	kaaran-le
yesterday	I-ag	restaurant-in	eat-pst,ls	that	reason-for

ma	biraami	bha-e'.
I	sick	be-pst,ls

'Yesterday I ate in a restaurant. For that reason I am sick now.'

Examples.

77)

solu-maa	saa'De	saat	hajaar	aaTh	hajaar	phiT	uccaa
Solu-in	half	seven	thousand	eight	thousand	feet	high

bha-eko	hu-na-le	teti	jaaDo	ta	chai-na.
be-pst.p	be-inf-because	so much	cold	att	be,pr,3s-neg

'Because the altitude of Solu is seven and a half to eight thousand feet, it is not so very cold there.'

78) tio gairo paani ra Thulo taal bha-eko hu-na-le, baagh
that deep water and big lake be-perf be-inf-because tiger

paani-bhitra Dub-era mar-io.
water-inside sink-sa die-pst,3s

'Because the water was deep and the lake big the tiger drowned in the water.'

79) hijo mai-le resTuraa'-maa khaa-eko hu-na-le biraami
yesterday I-ag restaurant-in eat-perf be-inf-because sick

bha-e'.
be-pst,1s

'Because I ate in a restaurant yesterday, I am now sick.'

80) pachi raamro nokari paau-ne hu-na-le ū Taaip
afterwards good job get-def be-inf-because he typing

sik-dai-cha.
learn-prog-pr,3s

'In order to get a good job afterwards, he is learning to type.'

5. Temporal Identification Sentence

margin	dep cl perf	nucleus	indep cl
+		+	
event or state	prior or concurrent to the event or state of the nucleus	temporally identified event or state Neutral	temporally subsequent or concurrent to event or state of margin (relative to discourse time)

Figure 29. Four-box formula for temporal identification sentence.
dep cl perf = clausal + perfective participle ending *-eko*.

Aspect of margin. The predicate of the dependent clause takes the perfective participle form. This same form combines with an optional auxiliary to form the past perfect tense. However, in this sentence type it is clearly a dependent form since the auxiliary *never* occurs.

Deletions. If margin and nucleus have the same subject, it is obligatorily deleted in one of them, usually in the margin. However, this sentence type occurs more frequently with two different subjects.

Tense and mood. Tense and mood of the sentence are determined by the nucleus.

Examples.

81) haami iaa' bas-eko dher-ai barsa bha-i-sak-io.
we here live-perf many-em year be-v-finish-pst,3s

'We have been living here for many years.'

82) haami sahar ga-eko ul-le thaa paa-io.
we town go-perf he-ag knowledge get-pst,3s

'He learned that we went to town.'

83) baabu-le dukha gar-era paisaa kamaa-eko choraa-chori-le
father-ag hardship do-sa money earn-perf son-daughter-ag

khaan-chan.
eat-pr,3pl

'While the father works hard and earns money, the sons and daughters just eat it up again.'

84) haami-le caai' ni dukha gar-era oili-era kamaa-era
we-ag sp att hardship do-sa wilt-sa earn-sa

paisaa leaa-eko caai' ni, u khaan-cha.
money bring-perf sp att he eat-pr,3s

'While we endure hardship and wilt away and toil hard to earn some money, he just eats.'

85) cautaraa-maa khuTTo jhunDiaa-era bas-eko saa'p-le
resting place-on leg hang-sa sit-perf snake-ag

Tok-era u gar-e-cha.
bite-sa that do-perc-pr,3s

'While he sits on the resting place, hanging down his feet, the snake bites him and that was all that there was to it.'

C. Sentence Embedding

In the description of sentence structure up to this point, we took into consideration only the pairing of two clauses into one larger unit. We deliberately ignored sentence embedding, because we feel that on the grammatical level the clause is the primary unit which fills the nucleus and margin slots in the sentence. Because of the embedding which is possible, some have preferred to have sentences as fillers in these slots, with the understanding that if there were only one clause in one slot it would be a simple sentence. (See, for example, Bower and Erikson, 1967.) We feel, however, that to posit sentences as the basic fillers of the sentence slots disguises the succession of ranks in the grammatical hierarchy. For this reason we have at first ignored sentence embedding in the description of complex nuclei.

Such a "single minded" description accounts for the majority of the sentences of our corpus. But sentence embedding also occurs. In principle we assume that any margin and any nucleus can embed any complex sentence; however, not all possible combinations have been observed. In our corpus only five different combinations occur. These are:

condition and coordination
reason and coordination
inclusion and condition
inclusion and concession
undefined concession and adversion

For each of these combinations, the formula showing how they have been analyzed and one example are given.

1. Condition Sentence with Embedded Coordination Sentence in the Nucleus.

S =	+ margin	dep cl c 2	+ nucleus	coordination sentence
	condition		outcome	

Figure 30. Four-box formula for condition sentence with embedded coordination sentence in the nucleus.

Example.

1)

tẹso	gar-e-na	bhan-e	asal	biu	ra	kamsal	biu
that way	do-pst,3s-neg	say-perc	good	seed	and	bad	seed

mis-in-cha	ra	arko	paTak-ko	dhaan-ko	kheti	bigr-in-cha.
mix-pas-pr,3s	and	other	time-of	paddy-of	crops	spoil-pas-pr,3s

'If it isn't done this way, the good and the bad seeds get mixed up and the next rice harvest will be spoiled.'

2. Reason Sentence with Embedded Coordination Sentence in the Margin

S =	+ margin	two coordinated dep cl r	+ nucleus	indep cl
	propositions of reasons		prop of outcome	

Figure 31. Four-box formula for reason sentence with embedded coordination sentence in the margin.

Example. This example poses some problems for embedding. The two clauses in the margin are not independent as is the case in a straightforward coordination sentence. We have two dependent reason clauses coordinated with the balancing link ani 'and then.' Examples like this suggest that we should regard coordination not as a sentence type but as an operation which can be applied to various units. We have not taken this course of analysis in this paper, but might want to pursue it in further investigations. Examples 4 and 5 pose the same problem.

2) taraai-maa caai' alik samma jamin bha-eko, ani paani
Terai-in sp a little even ground be-perf and water

pani prasasta paa-i'-ne hu-na-le, tiaa' caai' sajil-ai-sita
also plenty get-pas-def be-inf-for there sp easy-em-with

dhaan rop-na sak-in-cha.
rice plant-inf can-pas-pr,3s

'Because there is level ground and plenty of water, paddy cultivation is easy in the Terai.'

3. Condition Sentence with Embedded Inclusion Sentence in the Margin

S =	+ margin	two included dep cl c 1	+ nucleus	indep cl
	condition		outcome	

Figure 32. Four-box formula for condition sentence with embedded inclusion sentence in the margin.

Example.

3) ciThi paThaa-e pani aphu ga-e pani ust-ai ho.
letter send-perc also self go-perc also the same-em be,pr,3s

'Whether you send a letter or whether you go yourself, it is the same.'

4. Concession Sentence with Embedded Inclusion Sentence in the Margin

S =	+ margin	two included dep cl c 1 + pani	+ nucleus	independent cl
	concession		outcome	

Figure 33. Four-box formula for concession sentence with embedded inclusion sentence in the margin.

Example. Note that pani has a double function in this sentence. It functions as including link and as concessive particle as well. This has to be concluded from the semantic concession which is involved. In example 3, where no semantic concession is involved, pani functions only as including link.

4) kaam bha-e pani na-bha-e pani tapaai' Thik samai-maa
work be-perc also neg-be-perc also you right time-in

aau-nu par-cha.
come-inf must-pr,3s

'Whether there is work or whether there is no work, you have to come right on time.'

5. Constraint Sentence with Embedded Undefined Concession Sentence in Nucleus 1

S =	+ nucleus 1	undefined concession sentence	+ balancing link	conj	tara
	initial circum-stance		constraint predicted		but

+ nucleus 2	indep cl
constrain-ing comment	

Figure 34. For-box formula for constraint sentence with embedded undefined concession sentence in nucleus 1.

Example.

5) je bhan-e pani hun-cha, tara mero naam caai' na-bhan-
what, rel say-perc also be-pr,3s but my name sp neg-say-

a.
imp

'You can say whatever you like, but don't tell (them) my name.'

REFERENCES

Abdulky, Vicki June. 1969. Case grammar and the Nepalese language. A thesis presented to the faculty of the graduate school of Cornell University for the degree of M.A.

Ballard, Conrad and Robert E. Longacre. 1971. The deep and surface grammar of interclausal relations. Foundation of Language. 7:70-118.

Beekman, John. 1970. Propositions [illegible] their relations within a discourse. Notes on Translation, 37.

Bower, Bethel and Barbara Erickson. 1967. Tepehua sentences. Anthropological Linguistics. 9:25-37.

Bowman, Elisabeth. 1966. The minor and fragmentary sentences of a corpus of spoken English. IJAL. 32:3.

Engel, Ralph and Robert E. Longacre. 1963. Syntactic matrices in Ostuacan Zoque IJAL. 29:331-44.

Fuller, Daniel P. 1967. Delimiting and interpreting the larger literary units. Notes on Translation. 28:11-67.

Grimes, J. E. 1966. Some inter-sentence relationships in Huichol. Summa Anthropologica, pp. 471-80. Mexico.

Hale, Austin. 1972. Syntactic matrices: an approach to descriptive comparability. Paper presented at the XIth International Congress of Linguists, Bologna, Italy, August, 1972.

Lakoff, Robin. 1970. Questionable answers and answerable questions. (To appear in Braj B. Kachru et. al. [ed] Issues in linguistics: Papers in Honor of Henry and Renée Kahane, Urbana: University of Illinois Press.)

Longacre, Robert E. 1962. Sentence-level procedures. University of North Dakota, typescript.

________________. 1966. Trique clause and sentence: a study in contrast, variation and distribution. IJAL. 32:2-52.

________________. 1967. The notion of sentence. Monograph Series on Languages and Linguistics, 18th Annual Roundtable. 20:15-25. Georgetown University.

________________. 1968. Discourse, paragraph, and sentence structure in selected Philippine languages. 3 vols. Santa Ana Calif.: SIL. Vols. I and II. (Republished as Summer Institute of Linguistics Publications in Linguistics and Related Fields, 21.)

________________. 1970. Sentence structure as a statement calculus. Language. 46:783-815.

Morgan, James O. 1967. English structure above the sentence level. Monograph series on Language and Linguistics, 18th Annual Roundtable. 20:123-32. Georgetown University.

Waterhouse, Viola. 1963. Independent and dependent sentences. IJAL. 29:45-54.

Wise, Mary Ruth and Harold G. Green. 1971. Compound propositions and surface structure sentences in Palikur. Lingua. 26:252-80.

FOOTNOTES

[1] The principle language helpers for this study have been Mr. Hari Prasad Dhungana from Kathmandu and Mr. Dil Bahadur Thapa, also from Kathmandu. I wish to thank them for their willing and competent cooperation.

My gratitude also goes to Mrs. Evelyn Pike who has encouraged and guided me in this study and to her husband, Dr. K. L. Pike, who spent a considerable amount of time with me on the revision of the first draft of this paper.

Research was done under the auspices of the Institute of Nepal and Asiatic Studies pursuant to an agreement of cooperation between Tribhuvan University and the Summer Institute of Linguistics in Nepal. The research was supported in part by a grant from the U. S. Office of Education, Washington, D. C., under contract number OEC-0-097721-2778 (014).

[2] Some of the sentence introducers function also as balancing links in complex sentence nuclei. In some instances these conjunctions clearly are sentence introducers. This is supported by the fact that they may introduce an utterance; that is, in conversation they may co-occur with a change of speaker. (See, for example, examples 21-23). In other instances they clearly function as balancing links in complex sentence nuclei. Between these clear cases there remains an area of ambiguity, where either analysis could be justified. However, it does seem important to recognize the potential of these conjunctions for double function. A uniform analysis could not account for all cases.

Comparison of utterances where conjunctions have been analyzed as sentence introducers with utterances where they have been analyzed as balancing links of a complex sentence seems to point out the following: The sharing of elements is a decisive factor in the complex sentence. When the first proposition contains elements which apply also to the second proposition and which are therefore deleted there, the two propositions are felt to constitute one unit: a complex sentence. When there are no shared elements, the propositions are felt to constitute two units: two sentences. Ambiguity arises in cases where there is only a negligible amount of shared elements.

This observation suggests that a more systematic treatment of deletion rules in complex sentence nuclei might prove fruitful. The presence of shared elements seems to be obligatory, at least for certain complex sentence nuclei. The detailed description of complex sentence nuclei given in this paper is not exhaustive in this respect.

[3] For further details on associated action see footnote 6.

[4] For a description of Nepali clauses see C. M. Bandhu, Clause patterns in Nepali, in Part II of this volume.

[5] In the basic description of complex sentence nuclei we are ignoring the embedding of sentences. This is treated in a separate section at the end (section III. C.).

[6] I would like to acknowledge the help of Dr. K. L. Pike. He has contributed substantially to this part of the paper.

[7] Here we describe 14 complex sentence nuclei. In the first draft of this paper we had, in addition to these, three performative sentence types and a quotation sentence. The following examples illustrate what kind of constructions were covered by the performative types.

Performative 1:

haami	Thaan-chau'	ki	tio	asal	maanis	ho.
we	think-pr,1pl	that	that	good	man	be,pr,3s

'We think that this is a good man.'

Performative 2:

babisia-ko	laaqi	kehi	bacaa-era	raakh-au'	bhan-era	maanis-
future-of	for	something	save-sa	keep-opt,1pl	say-sa	man-

le	bicaar	gar-nu	par-cha.
ag	thought	do-inf	must-pr,3s

'Man must remember to save something for the future.'

Performative 3:

tio	maanis	ko	ho	ma-laai	thaa	chai-na.
that	man	who	be,pr,3s	I-to	knowledge	be,pr-3s,neg

'I don't know who that man is.'

Now we suggest that these types and the quotation sentence be described on the clause level. We would have a special set of performative clauses with an apposition to the object. The speech parts would be embedded clauses, sentences, or discourses in the apposition slot of the clause.

Footnotes. (cont'd)

In a similar way, we suggest that the *associated action* participles be described on clause level. They concern utterances such as the following:

sequence action:	ani	arko	gaau'-maa	ga-era	keTi	maag-i-di-o.
	and	other	village-in	go-sa	girl	ask-v-give-pst,3s

'And he went to another village and asked for a girl.'

concurrent action:	ani	esari	*rop-daa-kheri*	caai'	aaphno
	and	this way	*plant-ca-while*	sp	own

Thaau'-maa	maatr-ai	gaa'j	lagaau-na	hun-cha.
place-in	only-em	bundle	put-inf	be-pr,3s

'And planting this way, you may only plant in your own row.'

We do not suggest that an associated action slot be included in the simple clause formula but rather that a complex clause consisting of associated action slot(s) and simple clause be posited; the associated action slot would embed dependent simple clauses.

[8] Clausal: The formula for the clausal is the same as the simple clause formula, but the predicate consists only of the verb stem.

APPENDICES

A. Abbreviations Used in the Formulae

Ajd	adjunct
cl	clause
conj	conjunction
dep	dependent
indep	independent
neg	negative
nuc	nucleus
pos	positive
PR	predicate
prop	proposition
r	repetition
VP	verb phrase
/	alternating with

dep cl c 1 = clausal + perceptive participle *-e* ± *bhan-e*
dep cl c 2 - clause with restricted tense + *bhan-e*

B. Abbreviations Used as Glosses in the Examples

a	adjectivizer (-do)
ag	agent (-le)
att	attitude particle
aux	auxiliary
aux.h.	auxiliary, honorific (auxiliary used to form the honorific forms)
c	causative infix (-aa)
ca	concurrent action (-daa)
def	definite (aspect) (-ne)
em	emphasis particle or suffix (nai, -ai, -i)
ex	exclamation
f	future tense (indefinite future)
fe	feminine
h	habitual (aspect) (-da)
hon	honorific
inf	infinitive
imp	imperative
imp.h.	imperative honorific
interj	interjection
neg	negative
neg.p	negative particle
opt	optative
pas	passive
perc	perceptive (aspect) (-e)
perf	perfective (aspect)
pl	plural
pr	present tense
prog	progressive (aspect) (-dai-)
pst	past aorist
pst.p	past perfect (tense/aspect)
pst.r	past remote
pur	purpose
qm	question marker
rel	relative
s	singular
sa	sequence action (-era)
sp	specification particle (caai')
undef	undefined (particle)
v	verbal suffix (-i-, absolute particle suffix)

Most verbal suffixes are inflected for person and number. The following abbreviations have been used: 1s, 2s, 3s, 1pl, 2pl, 3pl.

C. Terminology Used for Tense, Aspect, and Mood

The writer of this paper has not studied the morphology of Nepali thoroughly. The following is merely a brief sketch of some of the more important aspects of the verb morphology in order to shed some light on the terminology used in this paper.

1. Complex Tenses Resulting from Intersection of Simple Tense and Aspect

The horizontal parameter lists the aspects; the vertical, the simple tenses. An x in the cell indicates that the given combination of tense and aspect occurs. (The list of the aspects is taken from Abdulky, 1969.)

	progressive -dai	perfective -eko	definite -ne	perceptive -e	habitual -da
future (-laa)	x	x	x(+cha)		
present (-cha)	x	x	x(±ho)	x	x
past (-thio)	x	x	x	x	x

2. Other Tenses in which Tense and Aspect are United

past aorist	(-io)
optative	(-os)

3. Dependent Participles

-daa	concurrent action follows
-era	sequence or associated action follows
-i-	absolute participle, occurs most frequently in compound verb phrases.

4. Moods

In the following matrix the horizontal parameter gives the three moods which we have distinguished in this paper, with positive and negative subdivision for each. The vertical parameter gives the simple tenses, and an x in a cell indicates that the given combination occurs. Optative has been listed with the tenses. According to this matrix it behaves like tense. In other instances, however, it seems to function more as mood.

	assertive		interrogative		imperative	
	pos	neg	pos	neg	pos	neg
present	x	x	x	x	x	x
future	x	x	x	x		
past	x	x	x	x		
past aorist	x	x	x	x		
optative	x	x	x	x		

Maithili Sentences

Alice I. Davis

CONTENTS

I. INTRODUCTION 260
  A. Scope and Purpose. 260
  B. Language Research. 260
  C. How to Find a Sentence 261

II. SENTENCE SYSTEM. 264
  A. Definitions. 264
  B. Contrast of Sentence Types 265
    1. The Semantics Tree. 268
    2. The Grammar Tree. 269
    3. Correspondence between the Trees. 269

III. DETAILED DESCRIPTIONS OF THE SENTENCE TYPES. 270
  A. Coupling Relationships 270
    1. Correlative Sentence. 271
    2. Alternative Sentence. 274
    3. Coupled Sentence. 276
    4. Contrast Sentence 278
  B. Restatement Relationships. 280
    1. Reiteration Sentence. 281
    2. Paraphrase Sentence 282
    3. Negated Antonym Sentence. 283
    4. Generic-Specific Sentence 284
    5. Question-Response Sentence. 286
  C. Cause-Effect Relationships 287
    1. Antithetical Sentence 289
    2. Concessional Sentence 291
    3. Reason Sentence 293
    4. Result Sentence 299
    5. Purpose Sentence. 301
    6. Negative Purpose Sentence 302
    7. Contrafactual Sentence. 304

8. Condition Sentence. 305
9. Warning Sentence. 307
D. Chronological Relationships. 308
1. Temporal Sentence 308
2. Immediate Sequence Sentence 313

REFERENCES. 314

FOOTNOTES 316

APPENDICES. 318
A. Maithili Phonemes and Their Orthographic Form. . . 318
B. Abbreviations. 319

I. INTRODUCTION

A. Scope and Purpose

The purpose of this paper is three-fold. First, it aims to provide some materials on the Maithili language as spoken by the Brahmin caste in the area around the town of Janakpur in south-eastern Nepal. This brief description of the internal structure and meaning of Maithili sentences may, secondly, be helpful for grammatical comparison across various languages in Nepal and India, especially among the Indo-Aryan language groups. In the third place, this analysis, since it has been done when language research is still in preliminary stages, may provide some useful hints to other technicians on methods for beginning sentence analysis of other languages.

Maithili sentence structure is a field of study rarely mentioned in previous literature dealing with this language and when mentioned, then only in briefest form.[1] Generally, descriptive works on Maithili concentrate on the varieties of sound and the complexities of the verb system. In addition, the major works on Maithili were done before the field of linguistics was giving much attention to structures above the clause level.

This analysis is Maithili-specific and does not purport to be exhaustive or capable of universal application. It is highly tentative, and further revisions and expansions are expected in the future when more textual material is available. The present work was done totally without reference to distribution on higher levels and largely without attention to variation at lower levels. Thus, many vital points of contrast and comparison between sentence types are regrettably missing. At a later date we hope to remedy this situation.

B. Language Research

During this investigation, Messrs. Shibnandan Mandal,

Jay Narayan Jha, and Keshav Thakur have served as able language assistants. I am indebted to all three of them for their help in gathering data and to Mr. Mandal for his patient and careful help in checking the data on which this paper is based. Without the capable English translations and explanations by Messrs. Mandal and Thakur, it would have been impossible to produce this paper at such an early stage of Maithili investigation.[2]

Data for this paper has been gathered under the auspices of the Institute of Nepal and Asiatic Studies, pursuant to an agreement of cooperation between Tribhuvan University and the Summer Institute of Linguistics in Nepal. The author also wishes to express appreciation to Andhra University, Visakhapatnam, India, for the seminars conducted on their campus. Partial support for the research was made available through a grant from the U.S. Office of Education, Washington, D. C., under contract number OEC-0-097721-2778(014).

I am greatly indebted to Dr. Kenneth L. Pike for his inspiration and direction in beginning analysis; to Dr. Ronald L. Trail for valuable suggestions, encouragement, and guidance in the analyzing and writing process; and to Dr. Austin Hale for his willingness to read and criticize the paper. In addition, I am grateful for the stimulating discussions from time to time with Mr. R. Christmas and Miss F. Woods.

C. How to Find a Sentence

Locating the boundary of a sentence has always been problematical. Dr. Kenneth L. Pike has suggested that perhaps dialogue can aid in the effort.[3] The suggestion was applied to some Maithili work, and also Mr. Burkhard Schöttelndreyer used the technique on Sherpa, a Tibeto-Burman language spoken in northeastern Nepal. Since helpful insights were gained by these investigations, the heuristic method is presented here with the expectation that it may prove beneficial to others in beginning sentence analysis.

We begin with the assumption that a minimal utterance in dialogue is a sentence (independent clause) and a minimum response is a word. We assume that for analytic purposes we can successfully identify and temporarily exclude hesitation and interruption phenomena from consideration. With this exclusion we can say that a change of speakers in dialogue will involve at least one sentence boundary and possibly two. Suppose we have a text which has been transcribed as a single sentence but which we suspect may actually consist of two sentences. If such a text can be rewritten as a dialogue such that a change of speakers may occur in the middle of the text without radically changing the meaning of the text then the sequence is no longer suspect. It consists of two sentences. Notice, however, the three conditions upon this analytic approach: there must be no hesitation, no interruption, and no change of meaning involved.

How is change of meaning checked? By substituting other words in place of the linking word or phrase. For example, recasting into dialogue the utterance:

I'm going home but I'm coming back.

results in: Speaker A: I'm going home.
Speaker B: But you're coming back?

In dialogue the but can be replaced by surely or I hope and the meaning remains the same, but when they are substituted in the original sequence, the meaning will be changed. Thus, we must assume that in this test the meaning is altered when the utterance is split in dialogue; so the original utterance must be one rather than two sentences.

Another instance of suspect sequence is:

It's late therefore I must go.

In dialogue it would become: Speaker A: It's late.
Speaker B: Therefore you must go.

Speaker B could replace therefore with that's why, and, or I think without changing the meaning. These same substitutions could be made as well in the original monologue sequence with no meaning change. In this case, a speaker change in the midst of the suspect sequence is perfectly acceptable; so this sequence must be analyzed as two sentences.

In the early analysis of Maithili, the reason-result and result-reason sequences were giving the most trouble when it came to defining boundaries. The following two examples will illustrate how Dr. Pike's suggestion proved helpful. The suspect links in the following examples are underlined. (See Appendix A for charts of Maithili phonemes and their orthographic representation.)

1)

kharheyä	bahut	tej	chalabälä	rahai	ahi	ke	lel	o	khub	tej
rabbit	very	fast	goer	was	this	for		he	very	fast

daka	chala	lägal
running	to go	began

'The rabbit was very swift therefore he started out running very fast.'

The spontaneous informant response to the query of whether this (Example 1) was one or two sentences was to say it was one. However, on setting up the situation so that there could be a change of speaker in the middle, he readily agreed that the first part could appear anywhere with no problem. The second part would have to be in some sort of context; that is, it could not be dialogue initial, but it was perfectly all right response, or even paragraph, initial. With very slight adjustment, this sequence could be changed into just one sentence, but in its present form it has to be two sentences.

2)

atek	pahine	o	pahych	geläik	kyäek	je	ki	asthir
so much	first	he	reach	went	why	that	Quest mkr	slow

aur	chalabǟlä	byakti	res	jitait	achh
and	goer	man	race	win	is

'He reached there so much earlier because the slow and steady runner wins the race.'

Because most of the utterances checked before we got to this one were of the two-sentence variety of Example 1, the language assistant had gotten accustomed to calling suspect sequences two sentences; so that is what he initially said Example 2 was. But when I tried to split it in the middle, he objected. The second part was all right standing alone (as long as it was not dialogue initial) but the first part must be accompanied by the second. The order could be reversed and put in the *ahi ke lel* form of Example 1 with no difficulty, but in its present form it must be one sentence.

Thus, in Maithili this technique led to a final analysis of *ahi ke lel* occurrences as reasonal introducers for simple sentences which are preceded by another sentence stating a reason, and the *kyaek je ki* structure as a link between the two bases of one Result Sentence.

In the Sherpa analysis, Mr. Schöttelndreyer had done no previous work on the sentence level, so this was a good test of whether this heuristic device could give a beginning point to analysis. The informant was instructed to take a narrative discourse and convert it into a dialogue, making a change of speaker at every possible opportunity. This, however, in the informant's view was not possible unless the dialogue allowed to Speaker B was restricted to the questions "Why?" or "How?" or the like. Since this would be viewed as interruption, it did not fit the requirements of the technique, and therefore was of no help.

Upon turning to a topicative text, the change to a dialogue became simple for the informant, and in redoing this type according to the original instruction, Mr. Schöttelndreyer obtained evidence for calling *sinang* 'although,' '*cilaasisi* 'because,' and *-si* 'if' conjunctions linking propositions in one sentence, and evidence for analyzing *'ti tapkiq* 'that therefore' as indication of a new sentence beginning. In the 14 clauses of Sherpa text on which this experiment was carried out, these decisions allowed the beginning analyst to say with a fair degree of certainty that five sets of those clauses would be sentences.

In summary, Dr. Pike's suggested technique of using discourse as an aid in defining sentence boundaries has proved helpful in both Maithili and Sherpa. On the basis of these limited experiments, we feel that the device should be useful for most languages in the beginning stages of sentence analysis. Procedural texts are perhaps the easiest variety to recast in dialogue form, but it should (with an imaginative language assistant) be possible with narrative discourses as well.

II. SENTENCE SYSTEM

A. Definitions

For the purpose of this paper, a sentence is defined grammatically as the level of clause combination and semantically as structured relationships between paired propositions. Independent clauses may themselves be simple sentences, although in this study we deal only with complex sentences. A sentence consists of a variety of optional peripheral items[4] which accompany the sentence nucleus or center. It is the structure of the sentence nucleus which is under focus here and from which the individual types acquire their distinctiveness and their names.

In this description, the following general definitions have been adopted for the grammatical components of the various sentence structures:

Adjunct is an emphatic item occurring in specific sentence types which serves to emphasize the relationship between the propositions involved.

Base is an independent clausal structure.

Dependent Base is a clausal structure which cannot stand alone due to a dependent feature found elsewhere than in the verb.

Introducer is an introductory item optionally occurring in a specific sentence type and which serves to signal the type of relationship between propositions involved in the sentence.[5]

Link is a conjunctive word or phrase which connects two bases. Two types of links occur: those allowing permutation of the bases (which will be indicated by *pLink*) and those prohibiting permutation.

Margin is an axis-relator or participial clausal construction[6] which cannot occur alone, which attaches itself to a base, and which is an integral part of the sentence, i.e., not in the periphery. It is always capable of permutation.

Subordinate Base is a clausal structure which cannot stand alone due to the presence of a subordinating feature in the verb.

On the semantic level, sentences are composed of propositions and connectors.

It seems plausible to assume that in any type of a discourse the speaker(s) must segment the text in order to communicate effectively. To develop a discourse many things must be said, but to say them all at the same time would be impossible, and to say them all with equal focus would boggle the listeners' minds. Therefore there must be some way for a language to impose an artificial sequence on events, to divide discourse into segments, and to focus on only certain of those segments at a time without losing the items which are out of focus. Items which are candidates for focus are probably signaled from the monologue level, determined by the overall purpose of the discourse. Although the present work is not intended to prove this theory and although sufficient Maithili textual material is not in hand to make application of the theory, we assume that these main focusing and subordinate focusing devices could be found at the sentence level. Perhaps certain of the sentence types are reserved for highlighting, and others may be primarily for the sidelighting process. Perhaps certain components of a sentence (like margins) subordinate focus, and other parts (like bases) give main focus. Perhaps items of minimal focus are consigned to the periphery of the sentence. All of these we do not know now, but the suggestions seem sound and worthy of further investigation.

B. Contrast of Sentence Types

The relationships between paired propositions in Maithili are divided and contrasted according to semantic distinctions as shown in Figure 1 and grammatical differences as indicated in Figure 2.* In order to establish contrast between sentence types, following the tagmemic form-meaning composite standard, we require that each sentence type appear on a separate branch of both the Semantics Tree and the Grammar Tree. If two types emanate from the same terminal branch on either one of the trees, they are considered as sub-types. Thus, although the Reason Sentence types appear in three different places on the Grammar Tree, they are classed as sub-types because they all emerge from the same branch on the Semantics Tree. Each node of each tree represents one feature on which the internal contrast of sentence types is based. For example, Reiteration and Paraphrase are contrastive types because semantically there is one node separating them and grammatically there are three nodes.

In general, the nodes split in a binary manner allowing the right-hand branches to present the positive aspect while the left-hand branches are distinct by the absence or non-obligatory status of that same aspect. Below the Semantics Tree is a general representation of the structure of the sentence types, and below the Grammar Tree is a general classification of the semantic relations between the types. The underlined nodes on each tree indicate the major divisions by which the types are classified at the bottom of the other tree. This has been included for gaining a general view of how semantic types are represented at the grammatical level and vice versa.

To facilitate the cross-referencing process between semantics and grammar, each terminal branch of each tree is numbered. The number appearing after each sentence name on each tree records the number of the branch on the other tree where the same sentence is located. For a full description and examples of each contrastive type, consult Section III where the order of the descriptions follows the left-to-right order on the Semantics Tree.

266b

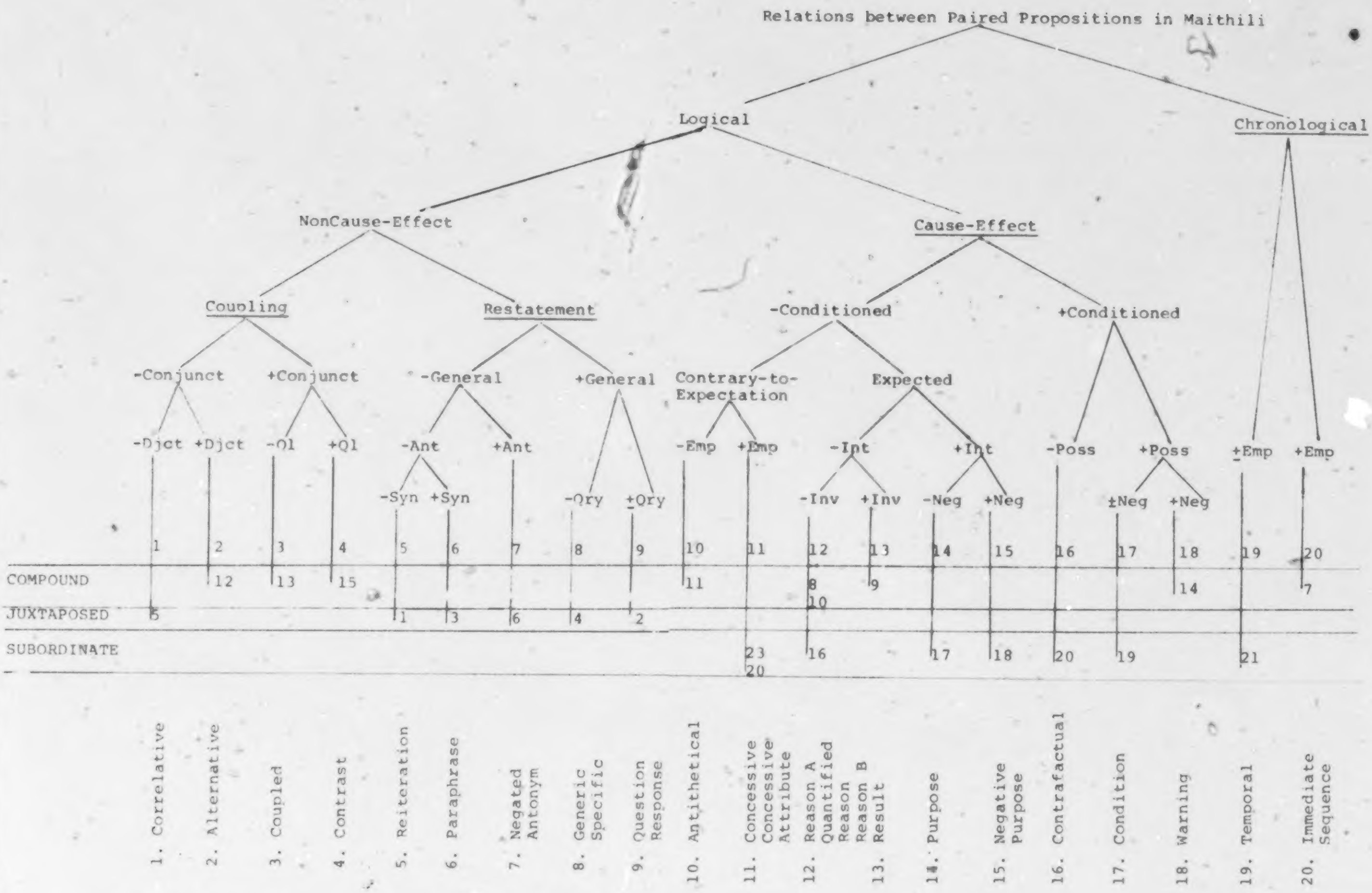

Relations between Paired Propositions in Maithili
Logical
Chronological
NonCause-Effect
Cause-Effect
Coupling
Restatement
-Conditioned
+Conditioned
-Conjunct
+Conjunct
-General
+General
Contrary-to-Expectation
Expected
-Djct
+Djct
-Ql
+Ql
-Ant
+Ant
-Emp
+Emp
-Int
+Int
-Poss
+Poss
±Emp
+Emp
-Syn
+Syn
-Qry
±Qry
-Inv
+Inv
-Neg
+Neg
±Neg
+Neg
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
COMPOUND
12 13 15 11 8 10 9 14 7
JUXTAPOSED
5 1 3 6 4 2
SUBORDINATE
23 20 16 17 18 20 19 21
1. Correlative
2. Alternative
3. Coupled
4. Contrast
5. Reiteration
6. Paraphrase
7. Negated Antonym
8. Generic Specific
9. Question Response
10. Antithetical
11. Concessive Concessive Attribute
12. Reason A Quantified Reason
13. Reason B Result
14. Purpose
15. Negative Purpose
16. Contrafactual
17. Condition
18. Warning
19. Temporal
20. Immediate Sequence

Figure 1. Semantics Tree. (Abbreviations used are as follows: Djct=Disjunct; Ql=Qualified; Ant=Antonym; Syn= ynonym; Qry=Query; Emp=Emphatic; Exp=Expected; Int=Intent; Poss=Possible.)

Maithi

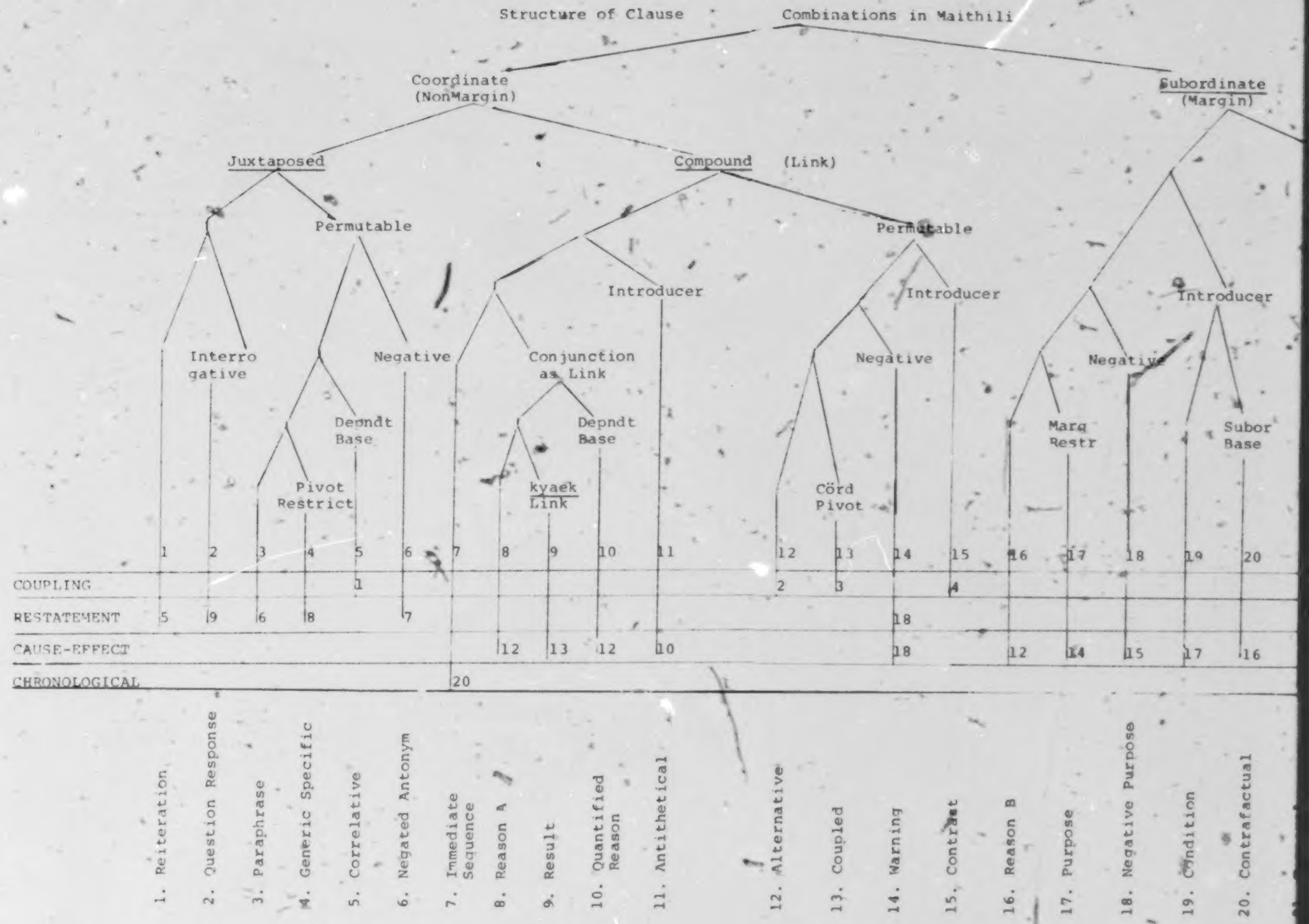
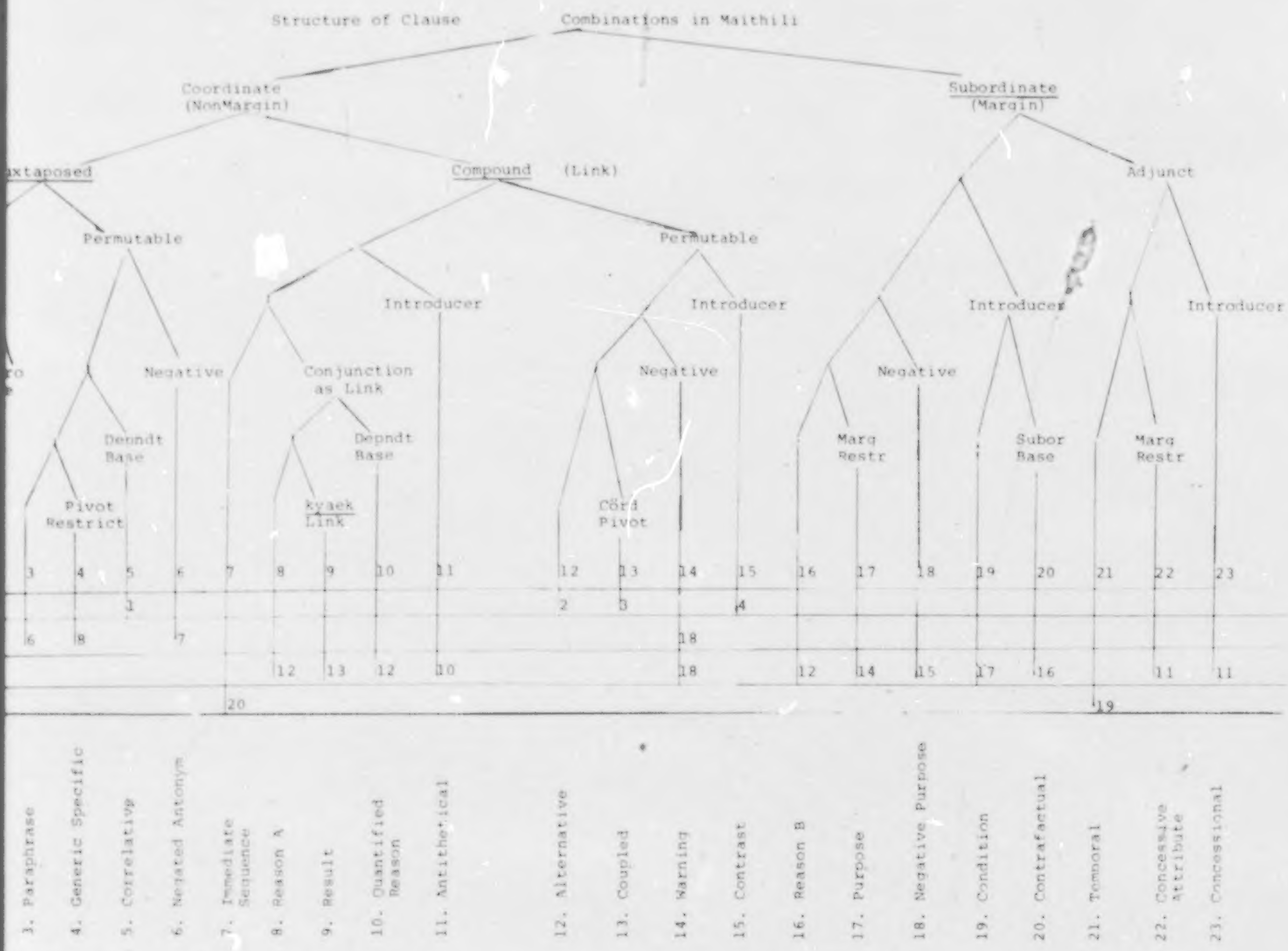

Structure of Clause Combinations in Maithili
Coordinate (NonMargin)
Subordinate (Margin)
Juxtaposed
Compound (Link)
Permutable
Permutable
Introducer
Introducer
Introducer
Interrogative
Negative
Conjunction as Link
Negative
Negative
Depndt Base
Depndt Base
Marg Restr
Subor Base
Pivot Restrict
kyaek Link
Cörd Pivot
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
COUPLING 1 2 3 4
RESTATEMENT 5 9 6 8 7 18
CAUSE-EFFECT 12 13 12 10 18 12 14 15 17 16
CHRONOLOGICAL 20
1. Reiteration
2. Question Response
3. Paraphrase
4. Generic Specific
5. Correlative
6. Negated Antonym
7. Immediate Sequence
8. Reason A
9. Result
10. Quantified Reason
11. Antithetical
12. Alternative
13. Coupled
14. Warning
15. Contrast
16. Reason B
17. Purpose
18. Negative Purpose
19. Condition
20. Contrafactual

Figure 2. Grammar Tree.


Structure of Clause Combinations in Maithili
Coordinate
(NonMargin)
Subordinate
(Margin)
uxtaposed
Compound (Link)
Adjunct
Permutable
Permutable
Introducer
Introducer
Introducer
Introducer
ro
e
Negative
Conjunction
as Link
Negative
Negative
Depndt
Base
Depndt
Base
Marg
Restr
Subor
Base
Marg
Restr
Pivot
Restrict
kyaek
Link
Cord
Pivot
3. Paraphrase
4. Generic Specific
5. Correlative
6. Negated Antonym
7. Immediate Sequence
8. Reason A
9. Result
10. Quantified Reason
11. Antithetical
12. Alternative
13. Coupled
14. Warning
15. Contrast
16. Reason B
17. Purpose
18. Negative Purpose
19. Condition
20. Contrafactual
21. Temporal
22. Concessive Attribute
23. Concessional

rammar Tree.

1. The Semantics Tree

As indicated on the tree in Figure 1, the four major divisions among semantic relationships of Maithili sentences are Coupling, Restatement, Cause-Effect, and Chronological. That there is a node which is labeled chronological does not mean no other nodes dominate chronological sequences--it merely indicates that sentence types under this node have a primary focus on the chronology while types elsewhere have their main focus on some other feature of the relationship. Sentences overtly stating concepts such as 'before,' 'after,' 'during,' or 'as soon as' are classified under the Chronological branch of the Semantics Tree.

All other relationships between propositions fall under the broad category of Logical, which is further divided into Cause-Effect relations and NonCause-Effect ones. Stimulus-Response is an alternate name for Cause-Effect, both of which terms show that one proposition in the sentence is a direct or indirect outcome of the other one. These types may be of the Conditioned, Expected, or Contrary-to-Expectation variety. Conditioned relations involve such utterances as "If you laugh, the world laughs with you." Contrary-to-Expectation types include relations like "Although water was scarce, some took baths," or "He deserved better treatment, but that's how he fared." Under the Expected node would fall relations like "He went home because he was tired," or "He climbed the hill to take a picture," or "He walked all day so he is sleeping now."

Sentence types which are not Cause-Effect and not Chronological are separated into Restatement and Coupling relationships. The major characteristics shared by the Coupling type of sentences is the absence of the features which established the other major nodes on the Semantics Tree. Therefore it is difficult to give a characterization of the Coupling types in one example. Diverse relations such as the following fall into this classification: "The quicker I arrive, the quicker our work will be done"; "Do or die!"; "He is shopping and he is working"; "I am tall but she is short."

There is greater cohesiveness among Restatement Sentence types. As the name implies, the second proposition in each type says basically the same thing as the first proposition did. This, in general, makes it possible to delete half of the sentence and still leave the text in a coherent state. Examples include "She was angry; she was utterly furious with him"; "Let the little children come--don't hinder them"; and "He is a good man: he is kind, honest, and faithful to God."

This broad classification covers all the semantic relationships found to date among Maithili paired propositions. We assume that further investigation may reveal other relationships, but these, too, should fit under the four main divisions just discussed. For discussion of the lower nodes on the tree, see the detailed description of these four major headings in Section III.

2. The Grammar Tree

The structure of Maithili sentences is displayed in Figure 2. Initial division is made on the basis of whether the clauses involved are dependent on, or independent of, one another. Balanced and non-balanced is another way of viewing the structure, but for the present we will refer to the two divisions as Subordinate and Coordinate. Subordinate constructions in Maithili are similar to the English forms, "Having won the race, he is headed for the Olympics," and "As he walked along, he practiced his speech," and "If you work hard you will do well."

Coordinate sentence types are like stone walls in Nepal--some are held together by mud or mortar but others are just stones placed side by side and held together because of the shape of the stones. The mortar for compound sentences is called "link" and may come in as many mixtures as is illustrated by the underlined items in these examples: "Speak softly and carry a big stick"; "It's raining so they won't come"; "Shape up or ship out"; and "The milk comes as soon as the sun is up."

"Juxtaposed" is the name given to sentences which hang together without the help of mortar links. Certain restrictions occur within each clause which make it fit well with the other clause, but the side-by-side position is all the external cohesion needed to produce the sentence. An example of juxtaposed construction in English is: "He is an important man--he's chairman of the bank."

These three major divisions embrace all the constructions found to date and should be sufficient to handle any new sentence structures that might be revealed in further data collection.

3. Correspondence between the Trees

Briefly now, we shall look at the correspondence between the Semantics and the Grammar Trees. Figure 3 presents the major semantic distinctions in the columns and the grammatical divisions in the rows.

The most obvious observation from the matrix is that Restatement relations occur only in a juxtaposed form, making them the most restricted of all the semantic types. Coupling relations show a decided preference for the compound structure, but Cause-Effect and Chronological relations are equally happy in compound or subordinate constructions. All of the Cause-Effect and Chronological sentences, i.e. those relations dealing with events in sequence (whether it is the sequence or the cause of it which is in focus), must have the relationship overtly expressed either in the link (compound) or the relator (subordinate). The compound structure seems to be the most versatile of the grammatical forms, representing all but Restatement relations, while juxtaposed handles only varieties from the left half of the Semantics Tree and subordinate maps only branches on the right half.

COUPLING	RESTATEMENT	CAUSE-EFFECT	CHRONOLOGICAL	
Coupled Contrasted Alternative		Antithetical Reason A Quantified Reason Result Warning	Immediate Sequence	COMPOUND
Correlative	Reiteration Paraphrased Generic-Specific Negated Antonym Question-Response			JUXTAPOSED
		Concessive Concessive Attribute Reason B Purpose Negative Purpose Contrafactual Conditional	Temporal	SUBORDINATE

Figure 3. Relation between the Semantics and Grammar Trees.

III. DETAILED DESCRIPTIONS OF THE SENTENCE TYPES

The remainder of the paper will deal with the specific sentence types found in Maithili. Preceding each of the major divisions among the sentence types, a reproduction of the relevant branches from the Semantics Tree of Figure 1 will be given, accompanied by brief comments on the distinctive features involved. Then come the detailed descriptions of each sentence type. These descriptions will be presented first of all in a four-box formula[7] and then in prose, looking at the grammatical and semantic characteristics and the restrictions. Maithili examples appear throughout the text with a word-by-word translation, a notation of the grammatical function of each part of the sentence, and a free English translation.

A. Coupling Relationships

Relations between propositions which are nonChronological, nonCause-Effect, and nonRestatement are referred to as Coupling Sentences. They are divided according to the following distinctive features in Figure 4:

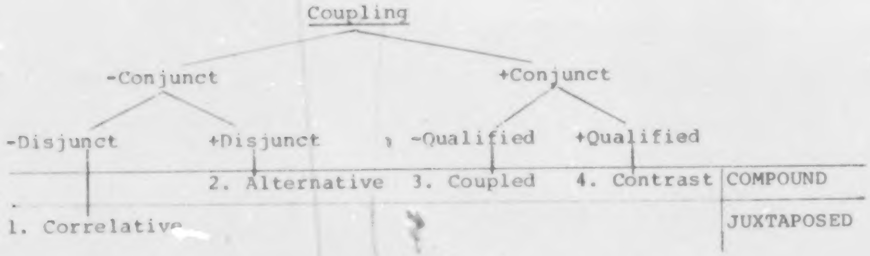


Figure 4. Reproduction of the Coupling node from the Semantics Tree. (Numbered labels in the tree refer to sections below.)

Formal logic uses the term "conjunct" to refer to a joining or a combination, and this is the first distinctive feature which divides Coupling Sentence types. On the +Conjunct side, the Contrast Sentence requires the link'but' which joins the second proposition in a qualifying manner to the first one. The 'and' link of the Coupled Sentence merely combines the propositions without adding any other indication of further relationship.

Turning again to formal logic, we use the "presenting alternatives" definition of the term disjunct, and this separates the two members under the -Conjunct node. The link 'or' of the Alternative Sentence requires a choice to be made among alternatives. Unlike the other Coupling Sentence types, the Correlative Sentence is a juxtaposed structure. The pronouns 'wherever,' 'however,' etc. in the first proposition produce a corresponding 'there,' 'so,' etc. in the second, making this the only Coupling Sentence with dependent bases.

1. Correlative Sentence

	dBASE 1	In Cl c		dBASE 2	In Cl c
+	Antecedent Prop	specifying correlative	+	Main Prop	specified correlative

Grammatically a Correlative Sentence requires two dependent bases. The verbs of the clauses filling each base are independent verbs, so it is not this feature which makes the bases dependent. Rather, it is the occurrence of a pronoun in Base 1 which, together with the whole clause, forms the antecedent for the pronoun in Base 2 and prohibits either base from standing alone. (Pronouns diagnostic of the Correlative Sentence are underlined in the following examples.)

3)	jahinä	hunkar	dhan	aelainh	tahinä	dhan	chali	gelainh
	as	his	wealth	came	so	wealth	move	went
	dB1				dB2			

As his wealth came, so it went.

Time, location, amount, manner, and person or object are the items susceptible to pronominalization in this way, and the pronouns indicating the shared constituent usually stand in initial position in the clauses. Figure 5 is a chart of the paired pronouns employed in this type of structure.

Correlative Constituent	Pronoun in Antecedent Proposition	Pronoun in Main Proposition	Meaning
Time	jakhan	takhan	when...then
	jahiyä	tahiyä	
Location	jemhar	omhar	where...there
	jata	ota	
Amount	jateik	ateik*	as much...that much
	jae	tae	
Manner	jahinä	tahinä	as...so
	jenä	tenä	
Person or Object	je	o	who, which...that one
		se**	

Figure 5. Pronouns used for shared constituents.
*In conversation the se pronoun from the last row may be substituted in the amount row, but if the bases are permuted it must revert to the normal ateik.
**A spoken form only.

In addition to the pronouns given here, a phrase with the pronouns jai and tai may also be used to indicate the shared item, as in Example 4. In such cases the entire phrase is treated as a single pronoun, i.e. if permutation occurs, the whole phrase is permuted as a unit.

4)	hamsab	jai	din	kaThmanDu	sa	paTnä	aelau	tai	din	sa	ek
	we dB1	which	day	Kathmandu	from	Patna	came	that dB2	day	from	one

din	pahine	jeni	DäkDar	ke	ghar	gel	rahaith
day	before	Jenny	doctor	of	house	went	stayed

Whichever day we came from Kathmandu to Patna, one day before that Jenny went to the doctor.

BEST COPY AVAILABLE

Frequently and especially in conversation, one of the correlative pronouns may be omitted, usually from the first base. Then structurally that base would appear to be no longer dependent; however, the pronoun is understood to be there so the base is still inherently dependent.

Semantically the Correlative Sentence consists of two dependent propositions with a shared pronominal constituent. One proposition is used as a specifying antecedent and the shared pronominal in the other proposition then refers to this specifying antecedent. The content of the antecedent pronoun is specified by the rest of its clause. This specification is quite often indefinite, referring to some other antecedent in the discourse or speech situation. The content of the pronoun of the main proposition is then supplied by reference to that of the antecedent pronoun. In this sense they may be viewed as correlative pronouns, and it is from this feature that the sentence takes its name.

5)	jakhan	duTa	karin	lagäba	partai	takhan	chäir	ädmi	ke	jarurat	partai
	when	two	karin	stick	operate	then	four	man	of	necessary	operate
	dB1					dB2					

When two karins (irrigation devices) are used then four men are needed to operate them.

The pronouns in the antecedent proposition very often can be translated as '____ever,' which seems to indicate that when this type of a sentence is used, either the actual item is unknown or it is unnecessary to specify it in other than relative terms.

6)	jemhar	jae	ke	bichär	ai	omhar	chalu
	where	go	of	thought	is	there	let's go!
	dB1					dB2	

Wherever you wish to go, let's go there.

The relationship involved may be either directly proportional or inversely proportional, as Example 7 is.

7)	jateik	ham	bises	adhyan	karab	tateik	kam	jänait	chhi
	as much	I	much	study	do	so much	less	know	am
	dB1					dB2			

The more I study the less I know. (However much I study, that much less I know.)

Any of the tenses may occur in either base, although it is most common to find the same tense in each base.

8)	jakarã	päs	me	dhansampati	chhai	se	tahinã	kɔraiya
	whose	to	in	wealth	is	he	thus	does
	dB1					dB2		

Whoever has the money (he) does it like this.

Indicative is the preferred mood, but imperative does occur in Base 2 (Example 6). Negation is possible, and it would generally occur only in Base 2.

As mentioned above, the pronouns normally occur at the beginning of their respective bases. To date not one exception to this has been found in Base 2, but in Base 1 infrequently the pronoun may be shifted to another spot in the clause. The pronoun of Base 2 may often be omitted and the deletion signaled by intonation in speaking or a comma in writing. If both of the pronouns are left out (thus subtracting the dependent elements), two sentences evolve with an implicit coupled relationship between them.

Deletion of shared items occurs, but there seems to be no pattern as to when it can and cannot occur. Notice, in this regard, the 'you' morpheme in Example 9 where it is deleted in Base 2, and then Example 10 (a permutation of 9) where it is retained.

9)	jenä	ahą̈	ke	nik	lägai	onä	khä	sakait	chhi
	as	you	to	good	sticks	so	eat	can	are
	dB1					dB2			

However you like, you can eat it.

10)	ahą̈	ekarä	khä	sakait	chhi	jenä	ahą̈	ke	nik	lägait	achh
	you	it	eat	can	are	as	you	of	good	sticks	is
	dB2					dB1					

You can eat it however you like.

Permutation of the bases is possible, both in elicited examples and in normal text. Non-initial occurrence of the pronoun in the first base is often a characteristic of such a permuted construction, as is the addition of the particle ki following the pronoun. Such use of ki does not alter the meaning in any discernible way.

Consideration was given to the possibility of calling the pronouns a link joining two independent bases. However, since these pronouns fill a normal clause- or phrase-level position and since they travel with their clauses in a permutation operation, we have decided to analyze them as constituent members of dependent bases.

2. Alternative Sentence

Alternation is an operation which can occur at several levels in a grammar. It is necessary, therefore, to determine at which level the alternation is working before calling every occurrence of 'or' a pivot in an Alternative Sentence. For purposes of this analysis, sentence-level alternation must involve the verb. A choice between subjects, objectives, manner, etc. is relegated to the phrase level. A choice of positive or negative or a choice in tense or aspect in the verb phrase qualifies for consideration.

on the sentence level, as do alternatives of action.

±	INT	cj	+	BASE 1	InCl	+	pLINK	cj	+	BASE 2	InCl
	Alt Sig			Choice Prop 1			Alt Conn			Choice Prop 2	

±	(	+	pLINK	cj	+	BASE 3	InCl	)
			Alt Conn			Choice Prop 3		

Grammatically the Alternative Sentence is a double (or triple) based construction joined by a permuting link. Each base is independent and filled with an independent clause.

11)

chähe	o	bimär	bheläh	chähe	ghar	geläh
either	he	sick	became	or	house	went
INT	B1			pL	B2	

Either he got sick or went home.

Two bases is the most commonly occurring structure, but three bases are also possible.

12)

umes	yä	dhän	käiT	rahal	achh	yä	ganit-ak	adhyan	ka	rahal
Umes	either	rice	cut	stay	is	or	math-of	study	do	stay
B1	INT					pL	B2			

achh	chähe	apanä	bhae	sa	gapp	ka	rahal	achh
is	or	own	brother	from	talk	do	stay	is
	pL	B3						

Umes is either cutting rice or studying math or talking to his brother.

The conjunctions capable of manifesting link are ki, yä, athabä, arthat, and chähe. The morphemes yä and chähe may also be repeated at the beginning of the sentence in the optional introducer position, as in Example 11. Note in Example 12 that the introducer has taken a position immediately preceding the items under alternation, rather than its normal sentence-initial location.

Semantically the Alternative Sentence offers a choice or alternative. In Example 11 one may affirm either that he got sick (choice 1) or that he went home (choice 2) but not both. What the sentence type affirms is that one of the choices but not both is asserted. It does not state which of the choices is asserted. This exclusiveness of choice is signaled by the connector translated 'or' and supported by the optional emphasizer rendered 'either.' Interestingly enough, the intuitively similar 'neither...nor' construction does not qualify for consideration under this alternative relation because in such a construction the assertion is that both are negated. Such a structure is treated under the Coupled Sentence because it signals an exclusion rather than an exclusive choice.

All tenses may occur in Alternative Sentence bases. Generally the same tense is used in both bases unless time is the item under alternation. Interrogative and imperative, as well as indicative, moods are common.

13)	yäta	nik	jakä	parhu	yä	adhyan	chhori	diya
	either	good	like	read!	or	study	leave	give!
	INT	B1			pL	B2		

Either read sincerely or give up your study!

Often the tense or aspect of the verb is the item registering the alternation. Frequently negation of the verb in Base 1 constitutes the alternative of Base 2.

14)	käj	khatm	bhel	ki	nai	bhel
	work	finished	became	or	not	became
	B1			pL	B2	

Is the work finished or not?

Note that negation in the second proposition may entail deletion of all other items in the clause. However, the verb will not be deleted in an indicative sentence but rather repeated along with the negative in order to distinguish it from a question. If the alternative is negation of Base 1, then only two bases are allowed.

Deletion of shared items also occurs commonly when other things are under alternation. Such deletion generally affects Base 2 rather than Base 1. Permutation of the bases is easily accomplished with no semantic change. Even when an introducer is present, the process of permutation does not affect it at all--the two bases merely switch places. However, when Base 2 is negation, permutation is not possible.

3. Coupled Sentence

Coordination, like alternation, is an operation which can appear on several levels of a grammar. In order for a use of 'and' to qualify for sentence-level consideration in this analysis, we require that it must couple together verbs in propositions.

+	BASE 1	InCl	±(	BASE n	InCl	)^2	+	pLINK	cj	+	FINAL BASE	InCl
	Prop 1			Prop n				Copl Conn			Final Prop	

Grammatically a Coupled Sentence consists of two bases joined by a balancing link. Each base is filled by an independent clause and the permuting link is manifested by aur or ä and infrequently by tathä or ebam.

15)	jeni	kaphi	pibaiya	aur	ham	chäh	pibai	chhi
	Jenny	coffee	drinks	and	I	tea	drink	am
	B1			pL	FB			

Jenny drinks coffee and I drink tea.

Example 16 illustrates the occurrence of three bases. As many as four bases have been found in the corpus. The extra base or bases appear following Base 1 and are joined to the rest of the sentence merely by juxtaposition rather than by an additional link.

16)	maTkuri	me	dahi	pɔraiya	dahi	dɔ	rakhaiya	aur	chhoT	chhoT
	matkuri	in	curd	make	curd	give	keep	and	small	small
	B1				B2			pL	FB	

pariwär	ke	ädmi	ahi	me	mächh	mą̈ns	kɔraiya
family	of	people	this	in	fish	meat	do

In a matkuri (type of clay pot) curd is made and kept and a very small family uses it for meat and fish.

Semantically the Coupled Sentence is a loose coordination of two propositions. Presumably any two independent clauses can be joined by coordination, but the operation automatically implies that there is some sort of relation between the events or states. The connector does not signal what the relationship is--it merely indicates that one exists.

The same construction is frequently used to denote sequence. Two tests can be applied to determine whether such a structure is being used as sequence or as simple coupling. If 'and' can be replaced by 'and then,' sequence is the probable meaning of the construction. If the bases can be permuted without violating the sense of the context, the 'and' is probably showing simple coupling.

Generally the tenses are the same in both bases, although they do not have to be. Indicative mood is favored, but interrogative and imperative are also used. A wide variety of clause types occur in each base, and Example 17 shows an embedded Conditional Sentence in the final base.

17)	des	ke	rakchä	karab	aur	mokä	parat	ta	laräi	me	jaeb
	nation	of	guard	will do	and	time	must	if	war	in	will go
	B1				pL	FB					

I will protect the country's security and go to war if necessary.

Negation is possible in either base or in both. When it occurs in both bases, the translation could be 'neither...nor' as well as 'not...and not.' Deletion of shared items is possible but seemingly not mandatory. Notice the repetition of 'in the hills' in Example 18.

18)

pahär	me	karin	lagäba	ke	asthän	nai	chhaik	aur	bises	ka
hill	in	karin	stick	of	place	not	is	and	more	of
B1								pL	FB	

pahärsab	me	oteik	khetiyo	nai	hoi	chhai
hills	in	so much	cultivation	not	is	is

In the hills there is no place to stand a karin (an irrigation device) and in the hills farming is not done on such a large scale.

The bases can be permuted with no difficulty since this structure does not involve any relationship other than simple coupling, and this function is achieved regardless of which proposition appears initially.

4. Contrast Sentence

± INT	cj	+ BASE 1	InCl	+ pLINK	cj	+ BASE 2	InCl
Conc Sig		Prop	Statement	Cont Conn	non-emph	Prop 2	contrast or qualification

Grammatically the Contrast Sentence consists of two independent bases joined by a permuting link. Independent clauses manifest each base, and a conjunction fills the link. Some of the literary conjunctions employed are *parantu*, *magar*, *paranch*, and *muda* but the colloquial form is the Hindi loan *lekin*. Optionally the introducer *onäta* may appear initially in the sentence, as in Example 20.

19)

chhoT	Ta	aï	lekin	chhichhaläh	seho	ai
short	emph	is	but	slippery	also	is
B1			pL	B2		

It is short but also slippery.

20)

onäta	akhan	ham	chäh	nai	pibai	chhi	mudä	bäd me	pib
although	now	I	tea	not	drink	am	but	after	will drink
INT	B1						pL	B2	

Though I'm not drinking tea now, I will later.

Since the Contrast Sentence is in basic structure the same as the Antithetical Sentence--with optional introducer *onäta* and two independent clauses joined by the same choice of conjunctions--we originally classed them as one type. However, the permutation process, the differing transformational possibilities, as well as semantic distinctions demanded a separation into two distinct types.

Semantically the Contrast Sentence contains two independent propositions, the second of which either qualifies the statement of the first (Examples 19-21) or offers a contrast to the first proposition (Examples 22 and 23). This makes it distinct from the Antithetical Sentence, which is basically a cause-effect relationship of the contrary-to-expectation variety. In the relationship of contrast, the second proposition contains two points of difference from Proposition 1, while in the qualification relationship, Proposition 2 merely gives one item of further information--often a negative aspect--regarding Proposition 1.

21)	ham	ebi	äi	bäjär	jaeb	lekin	nischit	nai	kon	samae
	I	Evie	today	bazaar	will go	but	certain	not	which	time
	B1					pL	B2			

me	jaeb
in	will go

Evie and I will go to market today but it's not certain at what time we'll go.

22)	pahineta	hamrä	plen	me	bahut	Dor	läge	lekin	pächhä	sa
	before	to me	plane	in	much	fear	stick	but	behind	from
	B1							pL	B2	

kichh	nai
any	not

Before I was very fearful of planes but afterwards not at all.

The concessive signal onäta 'although' may be prefixed to any Contrast Sentence. In such a case, if Proposition 2 is a qualification presenting a negative aspect which could also be interpreted as contrary-to-expectation, the link would then probably become the concessive link taiyo 'still' and the transformation to a Concessional Sentence would be complete. But if Proposition 2 is contrast or is a qualification with no contrary-to-expectation overtones, the contrast connector must remain as it is.

All tenses can be used in each base of the Contrast Sentence. Normally the tense of Base 1 will match that of Base 2, but Example 20 indicates that this need not always be so. Indicative mood occurs most frequently, but imperative and interrogative are possible in Base 2. A wide variety of clause types fill each base, as well as embedded sentences. In the example below a Correlative Sentence fills Base 1.

23)	jahiyä	ham̃	dhanik	chhalạu	tahiyä	ekar	pariwär	nai	mudä	äb
	when	I	rich	was	then	his	family	not	but	now
	B1								pL	B2

chintä	me	bhae	gelạu
anxiety	in	became	went

When I was rich then his family was not, but now I have become anxious.

Negation can occur in either or both bases if Proposition 2 is not an antonym of Proposition 1. (That is, using this construction it is impossible to say, "It is not new but it is not old." This would have to be expressed by means of a Coupled Sentence using 'and' instead of 'but.')

Permutation is easily accomplished by putting Base 2 in the place of Base 1 and Base 1 in that of Base 2, leaving the link and the introducer, if there is one, as it is. Since deletion of shared items from Base 2 is common (note Example 22), the permutation operation will also require that the deleted items be reinstated in Base 2 when it is permuted and then deleted from Base 1 when it takes the place of Base 2.

B. Restatement Relationships

All five of the Restatement Sentence types in Maithili are of the juxtaposed construction. They are logical rather than chronological in focus, but are not of the Cause-Effect variety of relations. The basis on which the five types are further separated is shown in Figure 6.

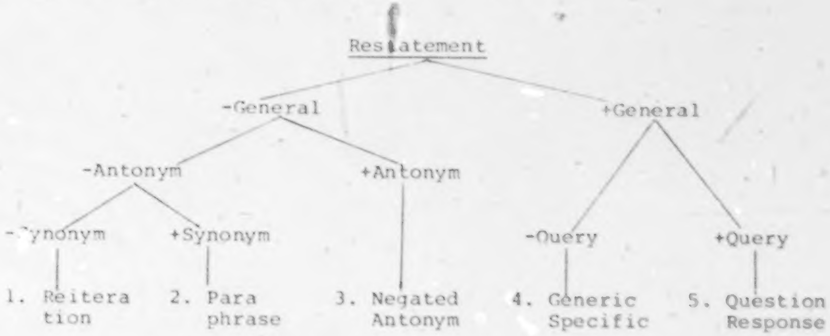


Figure 6. Reproduction of the Restatement node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

The term "restatement" indicates that the two propositions involved in the sentence are saying the same thing, as the English, "He is gone, he's not here." Thus it should be possible to eliminate one of the propositions and still leave the meaning intact. Perhaps this feature hints at the function of these sentence types in monologue--they are for use in focusing rather than in adding new information.

The sentence types dominated by the node +General in Figure 6 involve a restatement in which the statement is generalized and its restatement is specific. These are further divided into two types according to whether the general proposition is a generic statement or a generic query (rhetorical question). "How do I know? Because his wife told me," is a Question-Response Sentence type, and "The Terai is a bad place to be in summer--the temperature reaches 125 degrees" is a Generic-Specific type.

Under the -General node of the tree, the three sentence types are further separated on the basis of antonym, synonym, and virtual repetition. The Negated Antonym Sentence requires words which are opposites so that the restatement can negate the positive. In "He is gone, he's not here," "here" is the opposite of "gone" and the restatement duplicates the "he is gone" by negating its opposite: "he is not here." The Paraphrase Sentence calls on a synonym to do the restating, as "He looks happy, he beams all over." The Reiteration Sentence is basically a repetition form, with generally little new information being given. This sentence type is the simplest type of restatement.

1. Reiteration Sentence

+ BASE 1	InCl	+ BASE 2	InCl
Stat Prop		Reit Prop	repetition of subj & pred of statement

Grammatically the Reiteration Sentence is a double-based construction with no link and with no possibility of a third base. Independent clauses manifest each base.

24)

loksab	ängan	ghar	me	chintä	phikr	nai	rahaiya	kono
people	courtyard	house	in	anxiety	care	not	stays	any
B1								B2

chintä	nai	rahaiya
anxiety	not	stays

There is no anxiety or care among the people at home, there are no worries.

Semantically the Reiteration Sentence consists of a statement proposition followed by a reiteration proposition. Normally the purpose of the second proposition is merely to emphasize what has already been said rather than to give new information; thus simple repetition is also classed as a Reiteration Sentence. At least the subject and the predicate of the statement will be repeated in the reiteration and frequently more than that is repeated. Often the restatement will have an additional emphatic word not found in the statement, such as the superlative in Example 25.

25)

ahi	me	brämhanak	bhoj	prasidh	achh	bisesta	tähi	me
this	in	Brahmin's	feast	famous	is	most	this	in
B1						B2		

brämhanak bhoj prasidh achh
Brahmin's feast famous is .

The feast of the Brahmins is famous, the Brahmin feasts are the most famous of all.

Due to the nature of this sentence type, the verb tense, mood, and aspect will be the same in both bases. Since emphasis is the purpose of Base 2, this construction normally resists permutation. (It is difficult to emphasize something before it has been stated.) Embedding is not uncommon. In Example 26 a Correlative Sentence is embedded in Base 1.

26) karin sambhabta ohi samae me hamsab upyog karait chhi jakhan
karin possibly this time in we use do are when
B1

hamsab barsä sa niräs bhɔ jait chhi takhan ham
we rain with disappoint become go are then we
B2

karin ke upvog karait chhi
karin of use do are

We probably use the karin (an irrigation device) in the time when we are disappointed with the rains, then we make use of the karin.

2. Paraphrase Sentence

+ BASE 1	InCl	± pLINK	cj	BASE 2	InCl	± BASE 3	InCl
Stat Prop		Copl Conn		Synonym Prop		Synonym Prop	

Grammatically the Paraphrase Sentence is a double-based construction joined by an optional permuting link. Also optionally present is a third base. Each base is manifested by independent clauses.

27) hamsab barsä sa niräs bhɔ jait chhi sochai chhi
we rain with disappoint become go are think are
B1 B2

je barsä nischit nai haet
that rain certain not will be

We are disappointed with the rain, thinking that the rains certainly will not come.

When the option of a link is chosen, this sentence type appears to be like the Coupled Sentence at the grammatical level.

Semantically the Paraphrase Sentence consists of a statement proposition followed by a restatement in the form of a synonym proposition. The optional connector means simply 'and,' in no way changing the meaning when it occurs in a sentence. If a second synonym proposition is chosen, it will be paraphrasing the original statement, but since things equal to the same thing are also equal to one another, it could be described as a paraphrase of the first synonym proposition.

28)

pahär	me	karin	lagäba	ke	asthäne	nai	chhai	aur	khäs ka
hill	in	karin	stand	of	place	not	is	and	particularly
B1								pL	B2

lagebo	kartaik	ta	kata	lagataik	kon	Tham	lagataik
stand	do	if	where	stand	which	place	stand
					B3		

In the hills there is no place to stand a karin (irrigation device) and especially if going to stand one, where will it stand--in which place will it stand?

Embedding is a normal phenomenon in this sentence type, as is interrogative mood.

2[illegible])

ahą̈	konä	hinkä	sange	jä	rahal	chhi	ahą̈	ke	kenä	hinkäsab	ke
you	how	her	with	go	stay	are	you	of	how	them	of
B1							B2				

bheT	bhäi	gel
meet	become	went

How (is it that) you are travelling with her--how did you happen to meet her?

Imperative has not been found in the text materials prepared to date. The tenses in each base must be the same in order to maintain the paraphrase. Permutation occurs easily in sentences without embedding, but the construction seems unable to handle the complexity of permuting embedded structures.

3. Negated Antonym Sentence

	BASE 1	InCl		pLINK	cj		BASE 2	InCl
+	Stat Prop	pos/neg	±	Copl Conn		+	Antonym Prop	neg/pos

The Negated Antonym Sentence is grammatically a double-based construction with an optional permuting link. Textual material gathered to date shows no occurrence of three bases. The exponents of the bases are independent clauses and the coordinating conjunction fills the link position. When the link option is chosen, the form of this sentence resembles that of the Coupled Sentence, but the option is most often not chosen.

30)

kono	tarhak	takliph	nai	hoiya	sab	goTe	änand	sa	rahai	chhi
any	kind of	difficulty	not	be	all	one	happy	with	stay	are
B1					B2					

There is not any kind of trouble--everyone lives happily.

Semantically the Negated Antonym Sentence requires a statement proposition followed by an antonym proposition which gives the opposite sense of the original statement. The important feature of this sentence type is that one of the propositions must be positive and the other negative so as to counterbalance the effect of the antonym. Only thus may the two propositions be classed in a restatement relationship.

31)

hinkä	bhärat	äba	lel	ägyä	nai	delkhinh	käThmanDu-e	rahi	gelaith
to her	India	come	for	permission	not	gave	Kathmandu-emph	stay	went
B1							B2		

He did not give her permission to come to India; she stayed in Kathmandu.

In the original four-box description the statement was positive and the antonym always negative. However, this would make it difficult to decide which proposition to place first because the examples from text had the negative occurring an equal number of times initially and finally. Since any antonym could also be viewed as an original statement and the statement interpreted as its antonym, we have chosen to disassociate negative from antonym and simply to stipulate that one proposition must be positive and the other one negative. When the optional connector 'and' appears, it in no way alters the meaning of the sentence.

Generally the tense and mood of the verb is the same in both bases.

32)

bachchä	ke	äba	diya	okarä	ne	roku
child	to	come	give!	them	not	stop!
B1				B2		

Let the children come--do not hinder them.

Embedding does not occur in the textual examples at hand except in a quotation clause. Permutation is a normal operation in this sentence type.

4. Generic-Specific Sentence

Similar to all the other Restatement Sentence types, the Generic-Specific is grammatically a double-based construction.

Unlike other such types, however, this one may optionally have several additional bases. As many as six bases have been found in text. The addition of more than two bases also requires the addition of a link preceding the final base, unless the sentence is permuted so that the first base is final.

+

BASE 1	InCl
Stat Prop	generic

±

BASE 2	InCl
Spec Prop	for one item of Stat

± (

+

BASE n	InCl
Spec Prop	for same item of Stat

$]^n$

+

pLINK	cj
Conn	

)

+

FINAL BASE	InCl
Spec Prop	for same item of Stat

33)	o	barhiyä	ädmi	ai	o	imändär	dayälu	aur	isvar	bisw[illegible]	ai
	he	good	man	is	he	honest	kind	and	god	believer	is
	B1				B2		B3	L	B4		

He is a good man: he is honest, kind, and believes in God.

Since each of the non-initial bases cites one characteristic or action illustrating or supporting the general statement of Base 1, it is common for all but the last base to exhibit greatly reduced clause structure, as in Example 33 where all but the adjective has been deleted from Base 3 and all but the subject and adjective from Base 2.

Independent clauses manifest each base and the link position is filled by the coordinating conjunction or a conjunctive phrase used in a summary fashion.

34)	räit	me	hamräsab	ke	bahut	tarhak	takliph	ael	suta	ke lel
	night	in	us	to	many	kind	trouble	came	sleep	for
	B1								B2	

ochhaen	nai	bheTal	baisa	ke lel	siT	nai	bheTal	ant	me	ham
seat	not	met	sit	for	seat	not	met	end	in	I
			B3					L		B4

peTi	par	sutlau
trunk	on	slept

At night we had many kinds of difficulties: there was no place to sleep, no place available to sit, (and) in the end I slept on the trunk.

Semantically the Generic-Specific Sentence consists of two or more propositions, the first of which makes a general statement and the rest of which all take the same particular member of that statement and give more specific details of it.

35)

ahiTham	näriyal	bahut	sast	chhai	ekTä	näriyal	ke	däm
here	coconut	very	cheap	is	one	coconut	of	price
B1					B2			

pachäs	paisa	mätr
50	pice	only

Coconut is very cheap here--only 50 pice for one.

The connector is a signal that what follows will be the final specific detail given. It is possible to delete everything but the statement proposition without, as a rule, altering the general meaning of the text; so the specifics are used as a focus device for the original statement.

The type of clause manifesting Base 1 may be the same as those in succeeding bases or completely different. As mentioned above, reduced clause structure is common in the specific propositions, but if full clauses are given, then the tenses of all bases must be the same. No imperative or interrogative moods have been found to date and we suspect that they will not occur. Permutation is possible, as shown in Example 36, in which case all of the specific propositions are moved as a unit to sentence initial position, leaving the generic statement proposition at the end as a sort of summarizing comment.

36)

gäm	me	iskul	banolạu	pakkäk	ghar	banolau	sahkäri
village	in	school	I built	proper	house	I built	co-op
B2				B3			B4

sansthä	banbolạu	sarak	banbolạu	ityäd	käj	sab	kelạu
institute	I built	road	I built	etc.	work	all	I did
		B5			B1		

In the village I have built a school, a proper house, an institution, a road, and the rest--all this work I have done.

5. Question-Response Sentence

+ BASE 1	InCl introg	+ BASE 2	InCl indic
Quest Prop	generalized query	Resp Prop	answer

Grammatically the Question-Response Sentence contains two bases which are filled by independent clauses and related only by juxtaposition. The first clause must be in the interrogative mood and the second in indicative.

37)

kyaek	nai	achh	tahi	ke	ham	bahut	kichh	käran	bujhai	chhi
why	not	is	this	of	I	many	some	reason	seem	am
B1			B2							

Why not? I understand several reasons for this.

As the name of this sentence type indicates, it is semantically a question proposition accompanied by the response proposition. The response itself is all that is actually necessary to maintain the flow of the text, but the rhetorical query is included to highlight the information given as the answer. Therefore it is necessary to have the first proposition make a generalized query about an item in the answer. In Example 38 below, the unhighlighted statement may have been, "Then after that the thief took the key and began to empty the trunk." For good storytelling, the speaker generalized the verb of the statement, changed it to a question, and came out with this suspense-heightening sentence:

38)	takhan	takarä	bäd	o	chor	ki	kelak	kunji	laka	hunak
	then	that	after	that	thief	what	did	key	with	his
	B1							B2		

peTi	me	ke	sab	samän	nikäla	lägal
trunk	in	of	all	goods	take out	began

Then, after that, what did that thief do? With the key he started to take everything out of her trunk.

Unlike other Restatement Sentences, the Question-Response Sentence cannot drop off one proposition and leave the text comfortably understandable. But just a slight readjustment endows it with the characteristic deletability of other Restatement types. For example, the sentence given below merely needs to replace the 'it' with 'your life' and the text will be completely comprehensible with only the second proposition.

39)	ahą̈	ke	jiban	ki	achh	ek	Tä	päin-ak	bulbulä	jakä	achh
	you	of	life	what	is	1	thing	water-of	bubble	like	is
	B1					B2					

What is your life? It is a bubble of water.

In the few examples of this sentence type available from text, the verb of the question must be the same tense as that of the response. The query does not contain embedded constructions, but the answer could feasibly embed an entire discourse. Since an answer does not normally precede its question, this sentence type can not be permuted.

C. Cause-Effect Relationships

Propositions which are related in a cause-effect way are actually saying "first A, then B." However, they are not classified as chronological relations because the inherent sense is "because of A, B" and this puts the emphasis on the logical rather than the temporal.

The Cause-Effect division of the Semantics Tree is the largest section and is sub-divided according to the features shown in Figure 7.

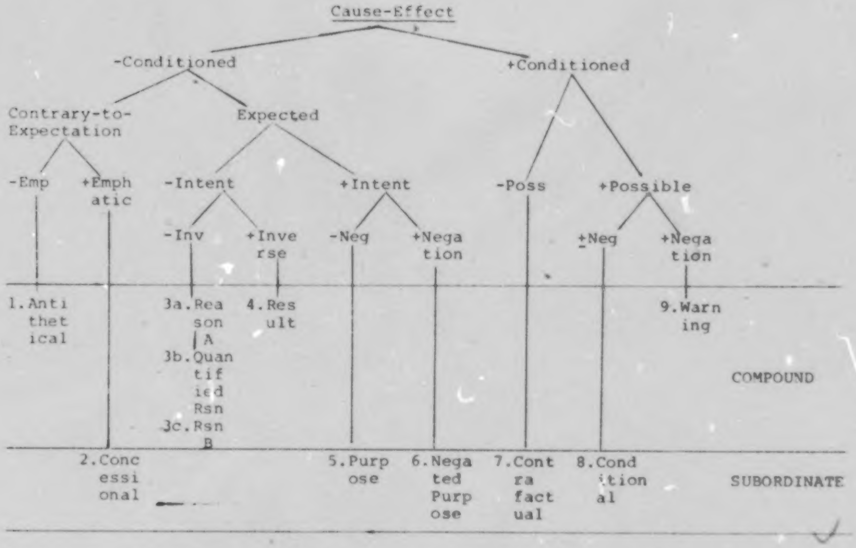

Cause-Effect
-Conditioned
+Conditioned
Contrary-to-Expectation
Expected
-Emp
+Emphatic
-Intent
+Intent
-Poss
+Possible
-Inv
+Inverse
-Neg
+Negation
±Neg
+Negation
1. Antithetical
3a. Reason A
3b. Quantified Rsn
3c. Rsn B
4. Result
9. Warning
COMPOUND
2. Concessional
5. Purpose
6. Negated Purpose
7. Contrafactual
8. Conditional
SUBORDINATE

Figure 7. Reproduction of the Cause-Effect node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

"If you sit by the fire, your feet will get warm" is a typical example of a conditioned relation between propositions. If the condition were impossible of being fulfilled, the sentence would be, "If you had sat by the fire, your feet would have been warm," and this would be a Contrafactual type of sentence. In Maithili the Warning Sentence requires a negation in the link, literally meaning 'if no,' and it is rendered into English as "Sit by the fire; otherwise your feet will be cold."

On the -Conditioned side of the tree, relations are divided again by whether or not the logical sequence is the expected one. Contrary-to-Expectation Sentence types are Antithetical and Concessive, which in English are, "He sat by the fire but his feet were cold" and "In spite of the fact that he sat by the fire, his feet were still cold." In Maithili the Concessive Sentences are a more emphatic type than the Antithetical. A specialized Concessive sub-type requires an attributive clause in the first proposition: "Although he is active, his feet are cold."

The next division at the Expected node separates sentence types which involve intention or purpose from those which do not. In English, too, distinction is made between "He sat by the fire in order to keep his feet warm" and "He sat by the fire; so his feet were warm." The Negative Purpose Sentence contains a negative which English would translate as 'lest.' The regular Purpose Sentence cannot be used if the purpose of an action is to prevent something--only the Negative Purpose Sentence can handle such a relationship.

Cause-effect relations under the -Intent node are finally separated on the basis of the order in which the propositions are presented. The Result Sentence uses inverse order: "His feet are warm because he sat by the fire" (effect-cause). All three varieties of Reason Sentence place the cause first rather than last. The difference between Reason A and Reason B sentences is structural form only. The Quantified Reason Sentence contains a measuring word in the first proposition, such as, "He sat so close to the fire that..."

1. Antithetical Sentence

±	INT	cj	+	BASE 1	InCl	+	LINK	cj	±	AD	adv
	Conc Sig			Thesis Prop	stimulus		Cont Conn	non-emph		Emph	

+	BASE 2	InCl
	Antithesis Prop	c-t-e response

Grammatically, the Antithetical Sentence has the same basic structure as the Contrast Sentence, with two bases filled by independent clauses and joined by a linking conjunction, with an optional introducer. The same parantu, paranch, magar, mudä, and lekin conjunctions are used as links and the same onāta as introducer. Optionally present may be an adverb in adjunct position, following the link.

40)	bahut	muskil	buijh	paral	lekin	kahuñka	hamsab	howrah
	very	difficult	seem	must	but	anyway	we	Howrah
	B1				L	AD	B2	

pahųch	geląu
reach	went

It was very difficult but we arrived in Howrah anyway.

Semantically the Antithetical Sentence is a cause-effect relationship with the antithesis being the unexpected result of the thesis.

41)	o	barhiyä	ädmi	rahai	lekin	okarä	säth	kharäb	byewahär	bhel
	he	good	man	was	but	him	with	bad	treatment	became
	B1				L	B2				

He was a good man but he got bad treatment.

That the outcome is unexpected may be emphasized by the addition of the adverbs *kohunaka* or *kono tärhąe* 'anyway' or *taiyo* 'still' following the contrast pivot, as in Example 40. However, for a stronger emphasis the sentence must be transformed into a Concessional type.

Past seems to be the favored tense in this construction, which is not surprising since the unexpected result would have occurred. However, present and future tenses are not impossible, as Example 42 demonstrates.

42)	onäta	ham	iskul	me	parha	jäi	chhi	lekin	parikchä	nai	deb
	although	I	school	in	read	go	am	but	examination	not	will give
	INT	B1						L	B2		

Although I study in school, I will not take the exam.

Generally the mood of each base is indicative but interrogative and imperative are also possible in Base 2. Negation occurs in either or both bases. Example 43 has an embedded Alternative Sentence filling Base 1. Deletion of shared tagmemes is common in Base 2.

43)	ahą̈	khäu	chähe	nai	khäu	lekin	käj	kara	parat
	you	eat	or	not	eat	but	work	do	must
	B1					L	B2		

Eat or don't eat, but you must work.

The Antithetical Sentence seems to resist permutation. In initial attempts at exchanging Bases 1 and 2 we could carry out the operation in only a few instances and even those seemed to be awkward. Then a transform to the Concessional or to the emphasized Temporal Sentence type using *par* (see Figure 9) was offered as the only means of permuting the base, and even the sequential transform felt unnatural to the language assistant. Several weeks later we returned to the same chart of Antithetical Sentences and read each example in a simple permuted form (Base 2-Link-Base 1). In every case the sentence was accepted as normal but in trying to permute it back to its original form (as it was actually written on the chart), once again there seemed to be strong resistance. From this exercise we ascertain that an Antithetical Sentence is not normally permutable, an important point of difference between it and the Concessional and Contrast sentence types. No doubt this phenomenon is tied in with paragraph and/or discourse level pressures which have not yet been studied. We surmise that permuting a sentence also alters the focus of the sentence; thus permutation is an operation not normally carried out on minimally or maximally emphatic constructions. Since an Antithetical Sentence is the less emphatic counterpart of a Concessional Sentence, this may be the cause of its resistance to permutation and the explanation of why a Concessional Sentence easily permutes. Further study of this point may be taken up at a later date.

2. Concessional Sentence

On the Grammar Tree there are two branches for Concessional Sentence, but on the Semantics Tree there is only one. Therefore, the two grammatical types are classed as sub-types under one semantic type. The first structure presented here handles a broader variety of situations and it will be called the Regular Concessional Sentence. The more restricted of the two sub-types is labeled Concessional Attributive Sentence.

2a. Regular Concessional Sentence

±	INT	cj	+	MAR	AR Cl3 taiyo	±	AD	adv	+	BASE	InCl
	Conc Sig			Init Prop	stimulus		Emph			Reality Prop	c-t-e response

The Concessional Sentence is grammatically a dependent construction consisting of a margin and an independent base. The margin is dependent due to the obligatory presence of the relator taiyo, even though the axis is filled by an independent clause.

44) math-o dukh haet taiyo ham dabäi nai leb
head-emph hurt will be still I medicine not will take
MAR B

Even though my head will hurt, still I will not take medicine.

As a sentence introducer, onäta or yadyapi optionally occur. The relator taiyo may be reinforced by the adjunct kohunäka.

45) päin kam chhal taiyo kahunäka kichh lokain ahi
water little was nevertheless anyway some people this
MAR AD B

me asnän kelainh
in bath did

Water was scarce, yet some people took baths in it anyway.

Semantically, in over-all meaning the Regular Concessional Sentence is quite similar to the Antithetical Sentence. In fact, in the initial analysis the two were considered impossible to separate. However, the differing permutation processes and the nature of the concessive relator as opposed to the contrast link led to this analysis as two distinct sentence types. The meaning of this construction is broadly a cause-effect (stimulus-response) relationship in which the initial proposition introduces a fact which leads the listener to expect a certain effect. The relator warns that the normal expectation is not realized, and the reality proposition proceeds to state the actual outcome.

46)

hamsab	bahut	garib	chhi	taiyo	nayä	chij	ke	utpädan	karai	chhi
we	very	poor	are	still	new	thing	of	produce	do	are
MAR					B					

We are very poor, nevertheless we are producing new things.

The relator taiyo 'nevertheless' (very similar in its meaning but different in function from the emphatic adverb taiyo 'still' used in the adjunct position in the Antithetical Sentence) has a more emphatic meaning of contrary-to-expectation than do various links glossed as 'but' in Antithetical Sentences.

As expected in all cause-effect sentences, past tense is favored although present and future may be used.

47)

yadyapi	ham	hunkä	kitäb	deliainh	taiyo	o	hamrä	sa	gapp
although	I	him to	book	gave	yet	he	me	with	talk
INT	MAR					B			

nai	kara	chähai	chhaith.
not	do	want	is

Although I gave him a book, he still does not want to talk to me.

Indicative mood occurs regularly in both margin and base, and if the interrogative or imperative are used they occur only in the base. Permutation is easily carried out on this sentence type, distinguishing it from the Antithetical Sentence. If there is an introducer present in the sentence being permuted, it may retain its sentence initial position or it may move with the margin to a sentence medial location.

2b. Concessional Attributive Sentence

	MAR	dCl 2		AD	particle		BASE	InCl
+	Init Prop	attributive stimulus	+	Emph		+	Reality Prop	c-t-e response

Although in basic semantic content it is the same as the Regular Concessional Sentence, the Attributive Concessional Sentence is structurally quite distinct. It is one of the few sentences with neither a link nor a relator.

48)

bimär	rahait-o	o	ghar	geläh
sick	stay-emph	he	house	went
MAR	AD	B		

Although he was sick, he went home.

Since the verb form in the margin is not independent as are verb forms of bases, the first clause could not be a base. We attempted an analysis of axis-relator clause filling the margin, but this proved unsatisfactory because once the dependent clause was put in axis position there was nothing left to function as a relator except the emphatic particle. This did not seem feasible since the real function of the particle is that of emphasizing rather than of relating. Therefore, this analysis of margin filled by dependent clause 2 and an obligatory emphatic particle has been chosen as the more truly descriptive solution.

This sub-type requires in the margin an attributive clause, usually quite short, with only the imperfect participle as the verb. This has the emphatic particle -o or -e attached to it.

49) pustak rahait-o syaed syäm adhyan nai karat
book stay-emph perhaps Syam study not will do
MAR AD B

Although he has a book, perhaps Syam will not study.

Only three participles are allowed in this construction: rahait, hoit (rare), or achhait. The latter is possible only if possession of an alienable item is involved, and it is usually accompanied by the postposition me 'in' following the emphatic adjunct.[8]

50) päi achhait-o me ham bhukhle rahalau
money be-emph in I hungry stayed
MAR AD B

Though I had money, I was hungry.

Semantically this sub-type is inherently a cause-effect relationship with the initial proposition describing a state and the reality proposition indicating a contrary-to-expectation response arising from that state. The emphatic marker is the item carrying the 'nevertheless' or 'although' meaning in this construction.

3. Reason Sentence

The Reason Sentence can take either of two forms: a double-based construction joined by a link or a margin-base construction. In addition, there is a specialized variety of the double-based type whose structure is basically the same but whose meaning is slightly altered. This is the Quantified Reason Sentence. As yet, analysis of higher levels has not been done so it is not possible to define the environment in which each sub-type occurs, but we expect to find mutually exclusive distribution.

3a. Reason Sentence A (double-based)

+	BASE 1	InCl	+	LINK	cj cpt rel cj	+	BASE 2	InCl
	Resn Prop	logical source		BiDi Conn	recalls resn promises rslt		Rslt Prop	

Reason Sentence A grammatically requires two independent bases which are filled by independent clauses. The link is manifested by a variety of forms ranging from the literary conjunction phalswarup to the composite relative conjunction jai sa ki. Although both bases are grammatically independent, dependency of the two bases is seen in the semantic relation.

51)	o	thäik	geläh	chhalah	jai sa ki	o	nai	äib	sakläh
	he	tired	went	was	so	he	not	come	was able
	B1				L	B2			

He was tired so he could not come.

Semantically the Reason Sentence A contains a reason and a result proposition in a cause-effect relationship. As in the Result Sentence, the connector has a bidirectional function. The most common connector is jai sa ki which is literally 'that from this,' meaning "from that reason proposition, this result proposition comes." This bidirectional nature of the connector is recorded in Box 5 of the formula. Though not carrying such explicit marks of this double action, the filler phalswarup 'consequently' has the same meaning implicitly.

52)	ahą̈sab	maithili	sikha	me	bahut	parisram	kelạu	phalswarup
	you	Maithili	learn	in	very	labor	did	consequently
	B1							L

	ahą̈sab	barhiyą̈	sa	maithili	sikh	lelạu
	you	good	with	Maithili	learn	took
	B2					

You have worked hard in learning Maithili so you have learned it well.

Examples of Reason Sentences exhibit present, past, and future tenses in the bases. Due to the cause-effect nature of this sentence type, one would normally expect that if the tenses are not the same in the two bases, the tense of Base 1 should be prior to that of Base 2. This is, in fact, the usual situation. However, one interesting exception to this norm can be seen in Example 53 where Base 1 uses present tense and Base 2 the perfect.

53)	takhan	pher	dosar	kät	dai	chhi	jai sa ki	siddh	bhɔ	gel
	then	again	another	side	give	am	so	finish	become	went
	B1						L		B2	

Then I do the other side again so it is finished.

This example comes from a procedural text in which the narrator gives all directions regarding what is to be done in the first person present tense, and then generally explains what occurs as a result of these actions in a third person perfect tense. A further exposition of this phenomenon should be possible when analysis is done on higher levels.

Indicative is the only mood found to date. Negative occurs in both bases with no observable restrictions. Items shared by the bases appear not to be deletable.

54)

o	bimär	bhel	jai sa ki	o	ghar	geläh
he	sick	became	so	he	house	went
B1			L	B2		

He got sick so he went home.

Permutation of the bases is not possible. Generally simple independent clauses fill both bases, but we anticipate that more complex embeddings are also allowed. The relationship "A so B so C" cannot be expressed naturally with this sentence type--it is most natural to use the Reason B Sentence type (see 3c. below). However, if the focus is taken off the "so C" part of the relation so that it is not stressed as the logical consequence of B as well as of A, it is possible to embed a Coupled Sentence in the result proposition, as in Example 55. Structurally it would appear as:

(A)	(so)		(B)	(and/so)	(C)
BASE 1	LINK 1	BASE 2	(BASE 3	LINK 2	BASE 4)

55)

mae	bachchä	ke	kuaelak	jai sa ki	o	suit	rahai	aur	o
mother	child	to	fed	so	he	sleep	was	and	she
B1				L	B2				

käj	kɔ	sakae
work	do	able

Mother fed the baby so he slept and (so) she could work.

When multiple reasons are given, the reason proposition is filled with a Coupled Sentence:

	(A)	(and)	(B)	(so)	(C)
BASE 1	(BASE 3	LINK 2	BASE 4)	LINK 1	BASE 2

This construction handles "A and B so C" relationships.

3b. Quantified Reason Sentence (Reason A sub-type)

A further note is necessary on a specialized variety of Reason Sentence A. The formula looks much the same as the formula for the double-based Reason Sentence:

BEST COPY AVAILABLE

+	dBASE 1	In Clq	+	LINK	cpt rel cj rel cj	+	BASE 2	InCl
	Resn Prop	quant logical source		Conn	recalls resn promises rslt		Rslt Prop	

Grammatically and semantically this specialized type of Reason Sentence contains the same slots, fillers, and characteristics as the structure described in Reason A, with these two restrictions: first, the independent clause filling Base 1 must contain an adverb of quantification such as *ehan* 'such' or *ateik* 'so much'; and secondly, the link appears to use only *jai sa ki* or simply the relative *se* or *ki* 'that.'

56)

ehan	käj	karu	jai	sa	ki	apan	jiban	nirbäh	kai	saki
such	work	do!	that			own	life	support	do	able
dB1			L			B2				

Work in such a way that you can support yourself.

57)

ahą̈	ehan	namhar	käj	keląu	jai	sa	ki	hamsab	ahą̈	ke	dhanyabäd
you	such	big	work	did	that			we	you	to	thanks
dB1					L			B2			

dait	chhi
give	are

You have done such great work that we give you thanks.

There is not a great deal of difference in meaning between this construction and the one described above, but the quantification in the reason proposition adds a shade of meaning which would be rendered into English as 'so hard that' or 'so slowly that.'

Interestingly enough, the substitution of a quantifying adverb for a regular adverb in a cause-effect situation is capable of producing a sentence restructuring. Example 58 is an elicited sentence based on Example 59 which is a two-sentence sequence from a text.

58)

kechhuwä	ateik	rase	rase	chalait	rahai	ki	o	okrä̆	p[illegible]
tortoise	so	slow	slow	move	was	that	he	him	on
dB1						L	B2		

hąis	delkai
laugh	gave

The tortoise was going so slowly that he laughed at him.

59)

kechhuwä	bahut	rase	rase	chąlait	rahai.	ahi	ke	lel	okrä̆	par
tortoise	very	slow	slow	move	was	this	for		him	on

hąis	delkai.
laugh	gave

The tortoise was going very slowly. Therefore he laughed at him.

By the heuristic method described in Section I.C, this original reason-result sequence was described as two separate sentences. In this two-sentence stretch, by substituting ateik 'so much' for bahut 'very,' the language assistant said it now collapsed into one sentence and the ahi ke lel must be altered to ki 'that.' Thus, the original two-sentence sequence was restructured into one Reason Sentence of the quantified variety, merely by the substitution of a quantifying adverb.

3c. Reason Sentence B (margin-base)

	MAR	AR Cl 2 lel, käran sa AR Cl 3 tạe
+	Resn Prop	logical source

	BASE	In Cl
+	Rslt Prop	

The margin-base sub-type of the Reason Sentence grammatically contains a dependent margin and an independent base. The margin is filled by axis-relator clauses 2 or 3. The conjunction tạe must be used when clause 3 is chosen, and the postposition lel or the composite käran sa are employed with clause 2.

60) ghar gandä rahai tạe o okrä bahäir delak
house dirty was so she it broom gave
MAR B

The room was dirty so she swept it.

61) äi särhe tin baje me uThabäk käran sa bahut nind
today half 3 o'clock in rise reason from very sleep
MAR B

äbaiya
comes

Because I got up at 3:30 this morning, I'm very sleepy.

The lel construction carries overtones of a Purpose Sentence and the structure can be ambiguous if the base is capable of interpretation as an intention.

Semantically the Reason B Sentence is quite similar to Reason A. The relator does not exhibit a bidirectional nature as do the connectors in the Result and Reason A sentences, though. This feature, coupled with the dependency of the verb in the reason proposition, led to the analysis as margin-base rather than as an independent double-based construction. The cause is found in the reason proposition and the effect is given in the result proposition.

62) sain din hoba ke lel chuTTi ai
Saturday be for holiday is
MAR B

Because it is Saturday, there is a holiday.

Present, past, and future tenses are used in the base. Negative has not been found but that is no doubt due to the limitations of the data. Only indicative and imperative moods are utilized in the current examples. A variety of dependent clause types and even some dependent sentence types can be observed in the margin, and several independent clause types and some embedded sentences occur in the base. Deletion of shared items is possible in this type, as seen in Example 63 where the subject is given in the margin but not repeated in the base. Perhaps this deletion is possible only if the item has the same grammatical role in each part of the sentence.

63)	käilhkhan	ham	hoTal	me	khae	ke	käran	sa	bimär	bho	gelau
	yesterday	I	hotel	in	eat	of	reason	from	sick	became	went
	MAR								B		

I got sick because I ate in a hotel yesterday.

In this sentence type, permutation of the margin and base is possible. If axis-relator clause 3 with tae fills the margin position, the process of permuting the sentence may introduce some ambiguity. The conjunction tae occurring sentence finally, when deeply pondered, could also be interpreted as 'because,' thus creating a Result Sentence with the link in a strange position. However, this is a rare occurrence which can easily be cleared up from the context. Normally the hearer understands tae as 'so' in final position.

If it is necessary to give two reasons, this sentence type may accomplish it in the same way that the Result Sentence does. That is, an "A and B so C" meaning creates a Coupled Sentence embedded in the margin, while an "A so B so C" relation requires a Reason Sentence in the margin. The nature of these embeddings can be represented as follows:

$$\text{MARGIN}\left(\overset{\text{(A)}}{\text{BASE 1}}\quad\overset{\text{(and)}}{\text{LINK}}\quad\overset{\text{(B)}}{\text{BASE 2}}\quad\text{(so)}\right)\quad\overset{\text{(C)}}{\text{BASE}}$$

and

$$\text{MARGIN 1}\left(\overset{\text{(A so)}}{\text{MARGIN 2}}\quad\overset{\text{(B)}}{\text{BASE 2}}\quad\text{(so)}\right)\quad\overset{\text{(C)}}{\text{BASE 1}}$$

Also possible is the embedding of a Result Sentence in the result proposition for an "A so B because of C" relation, as shown here and exemplified in Example 64.

$$\overset{\text{(A so)}}{\text{MARGIN}}\quad\text{BASE 1}\left(\overset{\text{(B)}}{\text{BASE 2}}\quad\overset{\text{(because of)}}{\text{LINK}}\quad\overset{\text{(C)}}{\text{BASE 3}}\right)$$

64) okar babu mair gel chhai tạe o iskul chhori delak
his father die went was so he school leave gave
MAR B

käran okarä krisi käj karbä-k chhalai
reason to him field work do-of was

His father died so he quit school because he was doing field work.

4. Result Sentence

	BASE 1	InCl		LINK	cpt cj		BASE 2	InCl
+	Rslt Prop		+	BiDi Conn	queries rslt promises resn	+	Resn Prop	logical source

Grammatically the Result Sentence consists of two independent bases and a link. Normally the bases are filled by independent clauses, but sentence and paragraph may also embed in either base.[9]

65) o nai aib sakläh kyaek tạ hunkar ghar me ek Tä
he not come was able because his house in 1 thing
B1 L B2

aniwärj käj chhalainh
urgent work was

He could not come because he had an urgent job at home.

The link is filled by the conjunction kyaek or a composite conjunction of which kyaek is a part, or by the noun käran used in a conjunctive manner.

Semantically the propositions of a Result Sentence are in an inverse cause-effect relationship in which the first proposition describes an act or a state of affairs, and the second gives the logical source or cause which produced the action or state of affairs.

66) jai din ham gäm par sa aelạu tai din hamar bäbu
that day I village on from came that day my father
B1

gäm par nai rahaith kyaek hamrä gäm me ekTä
village on not stayed because my village in 1 thing
L B2

masomät ke ek jorä barad chhori bhɔ gel rahai
Muslim of 1 team ox theft became went was

The day on which I came from the village my father was not there because there had been a theft of a Muslim's team of oxen in the village.

The bidirectional connector which links the two propositions has as its basic component kyaek 'why' or käran 'reason.' This conjunctive use allows the connector to serve as a query to the result which has just been stated and also as the promise of an explanation to come. This query-plus-promise indication in the connector is one of the reasons for analyzing it as a link between bases rather than as a relator for a margin to a base. As such, the bidirectional function of the connector does not make one proposition dependent on the other but rather makes both dependent on each other semantically.

The tense of Base 1 is generally past or present, and Base 2 almost always employs the same tense as that of Base 1. The one exception found to this in textual material is given in Example 67.

67)

hamrä	dosar	sa	likhäba	paral	kyaek ki	ham	Devanägri
for me	another	from	writer	must was	because	I	Devanagri
B1					L	B2	

nai	likh	sakait	chhi
not	write	able	am

I had someone else write it for me because I cannot write Devanagri.

Indicative and imperative are the only moods found to date. Negation occurs in either base or simultaneously in both. In the event that two reasons are given for the one result, Base 2 is filled by a Coupled Sentence which gives a dual logical source (A because B and C).

(A)	(because)		((B)	(and)	(C))
BASE 1	LINK 1	BASE 2	(BASE 3	LINK 2	BASE 4)

However, if one of the reasons is a logical source of both the other propositions, then Base 2 is filled by a Result Sentence.

(A)	(because)		((B)	(because)	(C))
BASE 1	LINK 1	BASE 2	(BASE 3	LINK 2	BASE 4)

This gives an "A because B because C" relationship, shown in Example 68.

68)

o	iskul	chhori	delak	kyaek ta	okarä	krisi	käj	karbä-k
he	school	leave	gave	because	to him	field	work	do-of
B1				L	B2			

chhalaj	käran	okar	bäbu	mair	gel
was	reason	his	father	die	went

He quit school because he had to do field work because his father died.

Although it is often found, deletion of shared items does not always occur, as can be seen in Example 69 where the 'he' is given twice.

69) o qhar geläh kyaek ta o bimär bhɔ gel chhaläh
he house went because he sick became went was
B1 L B2

He went home because he was sick.

Permutation of the bases results in a new sentence type, the Reason Sentence. Alternatively, we could say that permutation is not possible within this construction. This non-permutability of propositions may be significant in the study of stress and focus which will be undertaken at a later date.

A variety of clause types occurs in both the bases, and embedding of more complex structures is not uncommon in either base.

5. Purpose Sentence

+ MAR	AR Cl 2
Purp Prop	intention

+ BASE	In Cl
Active Result Prop	

Grammatically the Purpose Sentence appears to be the same as Reason Sentence B in that the axis of the margin is filled by a clause with a dependent verb form with ke and the base calls for an independent clause. The only difference is that there is a greater restriction on the fillers of the relator position in this margin. For indicating purpose, only ke lel, ke bäste, ke hetu, or uddes sa can be used. (Note that ke can be realized as -k suffix on the verb form.)

70) kän me rui dhara ke lel seho delak
ear in cotton keep for also gave
MAR B

For keeping in the ears, they also gave cotton.

71) bäd me nik nokri paebäk hetu o Täip sikh rahal achh
after in good job obtain for he typing learn stay is
MAR B

In order to get a good job later, he is learning to type.

The distinctive nature of this sentence type becomes apparent from a sememic point of view. Purpose is either explicit or implicit in the first proposition. To test implicit cases where it might be called reason instead of purpose, paraphrase the margin as "in order to" or "for the purpose of" or "he wanted to...so." Reason margins answer the question, "Why--for what reason?" while

BEST COPY AVAILABLE

purpose margins answer the question, "Why--for what purpose?" Purpose is a volitional thing--something that does not just happen. There is always an aim or intention, conscious or unconscious, in the mind of the actor when he does the action found in the active result proposition.

72)

salai	kinbäk	bäste	ham	dokhän	me	gelau
matches	buy	for	I	store	I	went
MAR			B			

In order to buy matches, I went to the store.

Action in the second proposition is another contrast with a Reason A Sentence. Compare these two sentences:

Because he was famous John became rich.
In order to be famous John became rich.

In the first sentence, John need do nothing--his becoming rich will be automatic due to his fame. But the second sentence leaves us with the impression that John was active in acquiring wealth to achieve fame. Intention requires action, not event or state: so margin as purpose demands base as active result.

Past, present, and future tenses occur in the base. Indicative and imperative are the only moods found in the data, but we see no reason why interrogative could not also occur. Negation in the base is accomplished in the same way as in other sentence types, with addition of nai 'not' to the verb phrase, but to negate the margin, the Negative Purpose Sentence must be used.

Dual purpose is registered by repetition of the margin with the coordinating conjunction 'and.' This form indicates a dual purpose for the same action. To show a second purpose growing out of the first one, the most natural way is to embed a Reason Sentence in the margin, as in Example 73.

73)

okarä	apnä	bahin	ke	rupaiyä	debäk	chhalai	tae	o	okarä	sa
to him	own	sister	to	rupees	give	was	so	he	her	with
MAR										

bheT	karbäk	lel	dilli	gel
meet	do	for	Delhi	went
			B	

He was giving his sister money, so he went to Delhi to meet her.

6. Negative Purpose Sentence

+

BASE	In Cl
Active Result Prop	

+

MAR	AR Cl 3
Purpose Prop	negative intention

The grammatical structure of the Negative Purpose Sentence corresponds closely to that of the Purpose Sentence. Independent clauses manifest the base and axis-relator clauses fill the margin.

74) adhyan bahut kelaith kahị o pheil nai karaith tạe
study much did lest he fail not do so
B MAR

He studied hard so that he would not fail.

Important differences occur, however, and these involve the margin. First of all, note that the margin normally follows rather than precedes the base. Secondly, the verb form in this type is independent (see the exception for the imperative described below). A third distinction is in the relator required--a discontinuous morpheme whose first member kahi is optional and whose second member tạe is obligatory. The tạe morpheme occurs in the Reason A Sentence, but kahị is found only in this sentence type.

Although the Negative Purpose Sentence resembles the Purpose Sentence semantically, it contrasts with the latter by the negative intention (Box 5 of the formula) of the purpose proposition. This sentence type embodies a cause-effect relation in which the action of the first proposition is carried out to prevent the occurrence of the second proposition. Whether or not the kahị 'lest' part of the relator is present, the purpose verb must be accompanied by a negative morpheme. (Note that Example 75 is permuted.)

75) kahị glen suit nai ṛahai tae Don khelait achh
lest Glen sleep not stay so Dawn play is
MAR B

Lest Glen sleep, Dawn plays with him.

Interestingly enough, this sentence type can be transformed into a Warning Sentence. However, the kahị seems to carry an element of uncertainty and fear of the outcome which is not conveyed by the link in the Warning type.

When the base is manifested by an imperative clause, then the verb in the margin becomes dependent and the relator becomes + kahị and ± tạe.[10] In this form it could be translated 'so as not to.'

76) dauru nai kahị khais nai pari
run not lest fall not
B MAR

Don't run so as not to fall.

Future is the favored tense in both parts of this construction, but present and past are frequently found. As mentioned above, negation must occur in the margin, and it may be in the base as well. In order to get an imperative in both the margin and base, it is necessary to involve a third person and an indirect quotation in the process.

77)	hunkä	baichka	chala	lel	kahabain	kahi	khais	nai	paraith	tae
	him	carefully	move	for	tell!	lest	fall	not		so
	B					MAR				

Tell him to walk carefully or he will fall.

Generally, indicative mood is used. Permutation is possible with no difficulty, as in Example 75. However, if an imperative base is permuted, the tae is no longer optional--it then becomes obligatory in the construction.

7. Contrafactual Sentence

± INT	cj	+ MAR	AR Cl 4	+ sBASE	dCl cntf
Cond Sig		Unfulfilled Group Prop	stimulus which did not occur	Unfulfilled Outcome Prop	assured response which did not occur

The Contrafactual Sentence is a close relative of the Condition Sentence, both in structure and in meaning. Grammatically it contains a margin whose exponent is an axis-relator clause 4 and a subordinate base manifested by a dependent clause.

78)	o	ael	rahait	ta	sab	chij	Thik	bhɔ	gel	raihtaik
	he	came	had	if	all	thing	good	became	went	would have
	MAR				sB					

If he had arrived, all would have been well.

Both of the verb forms in the clauses must be marked by the contrafactual modality, which feature makes the clauses dependent. This dependency is not a normal one, however, because the verbs still carry person and tense in them, which normal dependent verbs do not. Aside from this dependent characteristic, the structure is like the conditional type and employs the same conjunctions for filling the introducer and relator positions, i.e., ta is relator and jou, jadi, and agar as introducer.

79)	yadi	o	naTkhaT	rahait	ta	ham	okarä	mäirtiaik
	if	he	naughty	had been	if	I	him	would have beat
	INT	MAR				sB		

If he had been naughty I would have beaten him.

When queried, native speakers say yadi, agar, or jou may indiscriminately be chosen to act as introducer, but there seems to be a slight tendency to favor jou in normal conditions and yadi in contrafactual ones--a hypothesis which can be checked further when more textual material is available.

Semantically the Contrafactual Sentence sets a condition which did not actually occur, and then states what the outcome would have been if the condition had been fulfilled. The implication is that the opposite of the unfulfilled condition occurred and so an outcome opposite to the one stated also occurred. In fact, a Contrafactual Sentence is easily transformed to a Reason Sentence by inserting negative indicative verbs in both margin and base and by changing the relator ta to the link jai sa ki. For instance, the meaning of Example 80 is virtually, "I could not read so I did not learn."

80) ham pairh saiktaų ta ham sikh lene rahaitaų
I read can if I learn take would have
MAR sB

If I could have studied I would have learned.

Only two tenses are possible in the Contrafactual Sentence--past (which native speakers say carries a feeling of future) and perfect. Interrogative mood occurs in the nucleus but imperative is not possible.

81) yadi khene rahaitaų ta ki bhɔ gel rahait
if eaten had been if what become went would have
INT MAR sB

If it had been eaten, what would have happened?

Negation is found in either or both clauses. The permutation operation is easily accomplished in the same manner as for normal condition types, with the introducer obligatorily occurring between base and margin and with the relator appearing at the end of the permuted construction.

8. Condition Sentence

± INT	cj	+ MAR	AR Cl 3 ta	+ BASE	InCl
Cond Sig		Ground (Protasis) Prop	stimulus which may occur	Outcome (Apodosis) Prop	assumed response

Grammatically the Condition Sentence is a dependent margin-base structure. Independent clauses fill the base, and axis-relator clause 3 manifests the margin.

82) khänä kharäb haet ta ahą̈ bimär bhɔ jaeb
food bad will be if you sick become will go
MAR B

If the food should be bad then you will get sick.

The relator must be ta, and its presence is what renders the margin dependent since the axis is filled by an independent clause. Phonetically the conjunction ta belongs with the base, but grammatically it adheres to the margin. Preceding the margin, an introductory conjunction jou, yadi, or agar optionally occurs.

83)

agar	ahą̃	asthir	sa	bajai	chhi	ta	ham	buijh	sakai	chhi
if	you	slow	from	speak	are	if	I	understand	can	am
INT	MAR						B			

If you talk slowly I can understand.

Semantically the Condition Sentence is a stimulus-response relationship in which the stimulus is a possible occurrence and the response is the expected outcome. The first proposition gives the ground of the condition and the second declares what the outcome will be when the ground is fulfilled. The introductory conditional signals are all translated 'if', but it is actually the relator which carries the onus of setting up the ground.

84)

ahą̃	akhan-e	pi	leb	ta	ägą̃	ke lel	kichh	nai	bächat
you	now-emph	drink	take	if	later	for	some	not	will remain
MAR					B				

If you drink it now there will be none left for later.

Native speakers normally translate the ta as 'then' when by itself, but since the sentence still contains an 'if' whether or not the conditional emphasis is present, the relator appears to be the real 'if' vehicle instead of the introducer. Generally this construction indicates an uncertainty as to whether the ground has, is, or will occur and with this understanding the 'if' introducer is sometimes translated as 'when.'

All tenses occur in both margin and base but the tenses need not be the same in both. However, the tense of the base generally must not be earlier in time than that of the margin. Frequently if both contain past tense, the construction will be rendered as a correlative time sentence with 'when' or 'whenever' and 'then.' Indicative mood is most common but imperative and interrogative are possible in the base.

85)

yadi	prophesar	sähab	ghar	me	hethinh	ta	i	chiTThi	hunkä
if	professor	sir	room	in	will be	if	this	letter	to him
INT	MAR						B		

dɔ	diyä
give	give

If the Professor is in his room, give him this letter.

Negation occurs in either or both constituents. Permutation occurs frequently and easily. Whether or not the introducer was present in the original sentence, it must occur in the permutation, creating a Base-Introducer-Margin pattern.

9. Warning Sentence

+ BASE 1	InCl	+ LINK	cpt cj	+ BASE 2	In Cl
Command Prop	imperative	Warn Conn	negation	Threatened Outcome Prop	future

Although it is related to the Conditional Sentence, the Warning Sentence is structurally distinct. It contains two independent bases joined by a link. Independent clauses manifest both bases, and the exponent of the link is what we shall call a composite conjunction. Actually it is a conditional sentence reduced into the morphemes nai ta and functioning as a link.

86) oi kukur lag nai jäu nai ta käiT let
that dog near not go! not if cut will take
B1 L B2

Don't go near that dog or it will bite.

Semantically the Warning Sentence contains a command proposition requiring an imperative verb. The connector, using the negative marker 'not' and the conditional marker 'if,' is virtually a condensed version of the command "if you do not do this, then such and such will happen." And the final proposition is the threatened outcome which states what presumably will happen if the command is not obeyed. This is in essence a cause-effect relationship used in a warning manner.

87) jaldi jäu nai ta Tre[illegible] chhuTi jaet
quickly go! not if tr[illegible] leave will go
B1 L B2

Hurry or the train will leave!

Infrequently the sentence construction is used for what might be termed a negative circumstance sentence. In this case the initial proposition is a statement rather than a command and the connector would be translated 'otherwise.' This also is a cause-effect relationship but denoting a type of purpose rather than a warning.

88) ham Thik Thik kahab nai ta o sab hasat
I good good will say not if he all will laugh
B1 L B2

I will say it correctly; otherwise they will laugh.

A warning obviously must be for future time; therefore, the tense of the verb in Base 2 is always future. The command is frequently a negative one and the outcome may also be negative. Both imperative and interrogative moods as well as the commonly used indicative are employed in the second base. Permutation is not possible with this sentence type.

89)

nik	jaka	karu	nai	ta	chhori	diya
good	like	do!	not	if	leave	give!
B1			L		B2	

Work well or else give it up!

D. Chronological Relationships

Propositions whose main focus rests on the temporal relations of the events involved are Chronological. This final division of the Semantics Tree has only two sentence types under it, but it handles a great number of utterances, especially in narrative discourses. The separation of these two chronological types is based on the fact that the Immediate Sequence Sentence is an obligatorily emphatic structure but the Temporal Sentence is only optionally emphatic, and the two types have distinct structures. The Immediate Sequence deals only with sequences such as: "Immediately after school was out, the family left for the beach." All other varieties of events in sequence or simultaneous events fall under the Temporal Sentence domain.

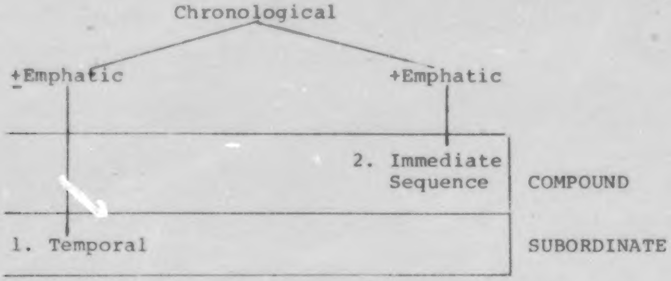


Figure 8. Reproduction of the Chronological node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

1. Temporal Sentence

	MAR	dCl 1 or 2 AR Cl 1 or 2		AD	particle		BASE	In Cl
+	Accompanying Event Prop		±	Emph		+	Main Event Prop	

The typical way of registering chronological relations is by means of the Temporal Sentence. Due to the great variety of possible fillers for Box 2 and functions in Box 4, Figure 9 has been included to further explain the diversity of sub-types encompassed by this formula.

Ex No	Form of Verb in Axis	Relator Used	Emphasis Adjunct	Relation of A (main verb to B (dependent verb)
92 99	verbal noun	ke bäd (me) 'after'	-e on verb seldom used, then mostly in future tense	A after B
94 101 103	verbal noun ending in -la	par 'on'	-e on verb	A after B
91 95 104	verbal noun	ke pahine sa pahine 'before'	-hi on relator but only when the two events could co-occur	A before B
96	verbal noun	sa 'from'	-e on verb	A begins only after B starts (hints at stimulus-response relation)
93 100 103	verbal noun	me, käl, samae ber } me kal 'in (time of)'	-hi on verb	A during B
90 102	conjunctive participle -ka '-ing'	none	none	A right after B margin and base must have the same subject
97 98	imperfect participle -ait 'as soon as'	none	-e on verb -e säth	A right after B usually emphatic

Figure 9. Varieties of Temporal Sentences.

Grammatically the Temporal Sentence is a margin-base construction with an optional adjunct slot. An independent clause fills the base position and a variety of axis-relator clauses or dependent clauses may fill the margin. The adjunct is a particle which occurs according to the restrictions shown in Figure 9.

90) chor ke pakeri-ka khub mäir märlak
thief to catch-ing very beat beat
MAR B

Catching the thief, they beat him harshly.

Semantically the Temporal Sentence deals with one event and its relation to another event. The main event may occur before, after, or during the accompanying event, but it is called the main event because it contains the one independent verb in the construction. In the following examples, 91 gives the before relation, 92 the after, and 93 the during.

91) hamsab jae sa pahine bahut chij samäpt kara chähait chhi
we go from before many thing finish do want are
MAR B

Before we leave, we want to finish many things.

92) o dokän me aeläk bäd chiTThi det
he store in come after letter will give
MAR B

After he comes to the store he will give the letter.

93) dhänak ropni samae me sarkär rupiyä karj det
rice of planting time in gov't money loan will give
MAR B

During the rice planting, the government will lend money.

The function of the adjunct tagmeme is to emphasize the sequential relation. Other emphatics are allowed in the clauses, but this emphasis slot is intended to handle only that which focuses on the chronological relation. Example 94 emphasizes that A started only when B had occurred.

94) hamsab nepäl ael-e par maithili sikha lagalau
we Nepal come-emph on Maithili learn began
MAR AD B

Only after coming to Nepal we started learning Maithili.

This sentence type can be used in a contrary-to-expectation manner if the adjunct position is filled by -o instead of the -e emphasis. For example, in Example 94 the meaning would change to: "On coming to Nepal, we started learning Maithili (instead of Nepali)."

In Example 95, stress is laid on the fact that A did happen *before* B.

95) räjä ke märba sa pahine-hi hamsab chali gel rahi
king of die from before-emph we move went were
MAR AD B

Before the king died we had already gone.

Another means of emphasizing the sequence "A after B" is shown in Example 96, in which the emphatic adjunct *-e* is attached to the "B" verb and *sa* 'from' is used as relator. This structure carries an inherent feel of a cause-effect relation.

96) kaThmanDu me rahal-e sa bimär bhɔ gelą̃u
Kathmandu in stay-emph from sick became went
MAR AD B

Ever since being in Kathmandu I have been sick.

For specific characteristics or restrictions relating to one particular type of margin exponent, see the accompanying chart of Figure 9. Permutation of the Temporal Sentence is easily done by moving the base to sentence initial position. In general, any tense is allowable in the base clause, as well as indicative, imperative, and interrogative moods. Imperative mood is shown in Example 97 and interrogative in Example 98. (In these examples, the imperfect participle *-ait* has undergone morphophonemic changes in the axis verb form.)

97) patr ebt-e hamrä lag laeb
letter come-emph to me beside bring!
MAR AD B

As soon as a letter comes, bring it to me.

98) ahą̈ nik hoit-e säth ki hamrä chiThäm aeb
you good be-emph with Quest mkr my place will come
MAR AD B

Will you come to my place as soon as you are better?

Since most of the relators are postpositions, the verbal nouns of the axis clauses must be in the oblique case. If the subject of the margin is not the same as that in the base, the margin subject must also be indicated in the oblique case. At times this may lead to some ambiguity, as the subject in the oblique case could also be interpreted as the possessor of a noun in the dependent clause, but context should decide the matter. In Example 99, different subjects are used in the "A after B" relation:

99) okarä bäjär pohųchbäk bäd ham mäch kinab
his market reach after I fish will buy
MAR B

After he reaches the market I will buy fish.

Example 95 above exhibits differing subjects in the "A before B" relation, and Example 100 shows the same phenomenon in the "A during B" relation:

100) glen ke sutak samae me Dɔn khelait chhal
Glen of sleep time in Dawn play was
MAR B

While Glen slept Dawn played.

When the subject is the same for both events, the direct case is used and it may appear in either the margin or the base. Example 92 places the shared subject in the margin while in Example 101 the subject is in the base.

101) i gapp sunlä par mae ke baDD hąsi lagalai
this talk hear on mother to much laugh stuck
MAR B

Hearing this, Mother burst into laughter.

It is possible for a Temporal Sentence to have multiple margins, but only in the case of -ka will the same relator be used in more than one margin.

102) khä-ka kaprä pahir-ka awai chhi
eat-ing cloth put on-ing come am
MAR MAR B

Eating and changing clothes, I'll come (I am coming).

Example 103 indicates how differing margins occur in the same sentence:

103) janakpur dekhak käl mandir dekhlä par o sab prabhäbit bheläh
Janakpur look time temple look on they impressed became
MAR MAR B

Upon seeing the temple during their visit to Janakpur, they were impressed.

It is also possible to get the effect of a double margin by embedding a Coupled Sentence in the margin, as Example 104 has done:

104) khet ropä ä paTäba sa pahine hamsab okarä jotai chhi
field plant and flood from before we it plow are
MAR B

Before planting and before flooding, we plow the field.

Maithili sentence structure affords several different methods for indicating chronological events. In addition to the specific type here described as Temporal Sentence, several other sentence types may also be employed. Naturally, the chronology of the events involved is not the primary emphasis of these other types, but if the speaker, for style or some other reason, wishes to draw on this secondary function, it is possible to do so.

Figure 10 presents the five sentence types capable of carrying a secondary meaning of temporal relations. Most frequently the Coupled and Correlative types are called upon to encode sequence, but use of Contrast, Condition, and Reason Sentence types is also possible. Contrast would indicate simultaneous events while Reason and Condition are usually reserved for events in sequence (with Condition introducing an element of uncertainty, as explained earlier). Both Coupled and Correlative Sentences can convey a broader scope of relationships in that they encode both sequence and simultaneous relations. Correlative may also show "A before B" and "A immediately following B" sequences. For further treatment on the use of non-temporal sentence types to indicate sequence, refer to Figure 10.

Sentence Type	Relationship* Encoded	Notes and Restrictions
Conditional	A after B	-no introducer is used -uncertainty of the event is always involved -Base 2 must be future if Base 1 is present
Coupled	A after B A during B	-the tense of Base 1 must not be subsequent to that of Base 2
Contrast	A during B	-the tenses of the bases match
Correlative	A after B A during B A before B A immediately after B	-must use the time pronouns -the "A before B" relation requires pahine with the pronoun in Base 2 -the "A immediately after B" relation must use -e emphasis on the pronouns
Reason A	A after B	

Figure 10. NonChronological Sentence types which may carry temporal notions.
* A = Base 2 or the base
B = Base 1 or margin

2. Immediate Sequence Sentence[11]

+ BASE 1	In Cl	+ LINK	particle	+ BASE 2	In Cl
Event Prop 1		Emph Conn		Event Prop 2	immediately following Event 1

Any one of the relationships encoded by a regular sequence Temporal Sentence may be altered to fit also into the emphatic Immediate Sequence Sentence. Grammatically the sentence is double-based and joined by a link. Independent clauses fill each base and the particle ki manifests link.

105) phulal ki utäir delạu
swell down gave
B1 L B2

As soon as it swelled, I took it off.

Semantically the Immediate Sequence Sentence deals with events which happen one immediately after another. Although native speakers say the ki has no meaning by itself in this construction, it signals a translation of 'as soon as.'

106) nani aelih ki bachchä janma lelak
Grandma came baby birth took
B1 L B2

As soon as Grandma came, the baby was born.

This is strictly a spoken, never a written, sentence type. The same immediacy of sequential meaning can be conveyed by using the -ait säth margin-base construction of the Temporal Sentence or by the emphasized temporal Correlative Sentence structure.

The only tense restriction apparent on this sentence type is that Base 1 must contain the same tense as Base 2 unless Base 1 is present, in which case Base 2 may be future. A question or a command is possible in Base 2, with Base 1 always remaining indicative (see Example 107). Permutation is impossible in this emphatic sentence.

107) bhänas haet ki satah ke bahäir debai
cook will be floor to broom give!
B1 L B2

As soon as you finish cooking, sweep the floor!

REFERENCES

Ballard, D. Lee, Robert J. Conrad and Robert E. Longacre. 1971. The deep and surface grammar of interclausal relations. Foundations of Language. 7:70-118.

Beekman, John. 1970. Propositions and their relations within a discourse. Notes on Translation. 37:6-23.

Beekman, John and Kathleen Callow. 1971 Propositions and their relations. Translating the Word of God, Chap. 15. Unpublished paper.

Callow, Kathleen. 1970. More on propositions and their relations within a discourse. Notes on Translation. 37:23-27.

Elson, Benjamin and Velma Pickett. 1964. An introduction to morphology and syntax. (Santa Ana, California: Summer Institute of Linguistics.)

Fairbanks, Gordon H. and Bal Govind Misra. 1966. Spoken and written Hindi. New York: Cornell University.

Grierson, George A. 1909. An introduction to the Maithili dialect of the Bihari language as spoken in North Bihar. Calcutta: The Asiatic Society.

Grimes, Joseph E. forthcoming. Outlines and overlays. Prepublication draft, submitted to Language.

Jamieson, Carole. 1970. The relationals of modern mathematical logic. Notes on Translation. 37:3-5.

Jha, Subhadra. 1958. The formation of the Maithili language. London: Luzac and Company.

Kellogg, S. H. 1875 (3rd rev. ed., 1938). A grammar of the Hindi language. London: Routledge and Kegan Paul, Ltd.

Lakoff, Robin. 1970. Questionable answers and answerable questions. (To appear in Braj B. Kachru, et. al. (ed) Issues in linguistics: Papers in Honor of Henry and Renée Kahane, Urbana: University of Illinois Press)

Longacre, Robert E. 1972. Hierarchy and universality of discourse constituents in New Guinea languages: discussion.

________. 1970a. Closing lecture of second New Guinea workshop. Mimeo.

________. 1970b. Sentence structure as a statement calculus. Language. 46:783-815.

________. 1968. Discourse, paragraph, and sentence structure in selected Philippine languages. Vol. 2. Santa Ana, California: The Summer Institute of Lingustics.

________. 1966. Hierarchy and methodology. Report of the Conference on Linguistic Methodology. Los Angeles.

________. 1964. Sentence-level procedures. Grammar discovery procedures, Chap. 9. The Hague: Mouton.

Prakasham, V. 1970. The syntactic patterns of Telegu and English--a study in contrastive analysis. Monograph No. 5. Hyderabad, India: Central Institute of English.

Reid, Aileen A., Ruth G. Bishop, Ella M. Button ~~and~~ Robert E. Longacre. 1968. Totonac: from clause to discourse. Summer Institute of Linguistics Publications in Linguistics and Related Fields, 17. Norman: University of Oklahoma.

Reid, Lawrence A. 1970. Central Bontoc: Sentence, paragraph and discourse. Summer Institute of Linguistics Publications in Linguistics and Related Fields, 27. Norman: University of Oklahoma.

Trail, Ronald L. 1970. The grammar of Lamani. Summer Institute of Linguistics Publications in Linguistics and Related Fields, 24. Norman: University of Oklahoma.

Waterhouse, Viola. 1963. Independent and dependent sentences. IJAL. 29:45-54.

Wise, Mary Ruth and H. G. Green. 1971. Compound propositions and surface structure sentences in Palikur. Lingua. 26:252-80.

FOOTNOTES

[1] Grierson mentions the relative and correlative pronouns (diagnostic of the Correlative Sentence) on page 99 and lists conjunctions on page 302. Jha treats the conjunction on page 567, but the section entitled "Sentences" on page 576 deals only with reduplication for intensity in short sentences. In Part II of Chapter 12 on Syntax, Kellogg presents the most lengthy discussion on sentences, but it is, of course, primarily with Hindi rather than Maithili in mind.

[2] Initial data collection was carried out by Miss Jennifer Williams and this writer in the Maithili-speaking village of Ghorghas, near the town of Janakpurdham, Dhanusha District, Nepal, during a period of 14 weeks spread between May, 1971 and April, 1972.

Maithili is the language of approximately 21 million people located in the southeastern Terai region of Nepal and the northern section of Bihar state in India. It is the Brahmin dialect under focus in this study, with an attempt to consider the spoken as well as the literary variety. An Indo-Aryan language, Maithili is normally classed as a dialect of the Bihari language.

[3] The suggestion was made in a conversation in the Maithili village during Pike's visit in April, 1972.

[4] The following items are candidates for inclusion in the sentence periphery: aur 'and,' lekin 'but,' tathäpi 'still,' ahi ke lel 'for this,' tähi kärane 'for this reason,' tähi laka 'by means of this,' takar bäd 'after that,' pahine ta 'before

then,' and the echo question ki nai 'or not' whose actual function is an affirmation seeker meaning, "That's right, isn't it?" These peripheral items may occur on any sentence type.

[5] An attempt to handle this introducer in a manner similar to the way Longacre handled cross-referencing particles (1968:113) proved unhelpful at the current stage of analysis.

[6] In initial analysis, only constructions with dependent verbs were called margin constructions due to the writer's original definition of margin. After great hesitation, however, we conceded to redefining the margin to include independent verbs, too, because the conjunction following the independent verb performed, especially in permutation, much more like a relator of an axis-relator clause than it did as a link in a base-link-base construction. Allowing independent verbs in a margin tagmeme seems to be the happier solution.

[7] The four-box formula is that part of Pike's nine-box tagmeme which is relevant for the writing of generalized grammatical/sememic formulas. The four boxes are reproduced here, but see A. Hale's paper in this same volume for a full description.

	FUNCTION	SYSTEMIC CLASS	ITEM
Grammatical	1. Focus	2. Category	
Sememic	4. Role	5. Concept	
Phonological			

[8] Alternately, it could be analyzed as an axis-relator clause 1 filling the margin, with the emphasis occuring between the axis and the relator (me), but this seems to make the description a bit awkward.

[9] In this present analysis, result and reason are treated as sentential notions, but if a whole monologue can also be a "because"-type structure, it seems not quite legitimate to treat it at sentence level as well. Example 66 is a case in point. The rest of the narrative beyond, "The day on which I came from the village my father was not there because..." involves a whole monologue of a theft, the need to search for the thief, the father being requested to assist, and the absence of the father. At the point of "because" the speech act appears to alter from narrative to explanatory. The problem then arises: at which level are because-type structures properly treated? Other relationships which pose the same question may be alternation, co-ordination, and perhaps contrast. These are herein treated as sentence-level relations, but paragraphs and monologues could feasibly carry the same notions. Can such notions legitimately be handled at more than one level? If not, on what basis does the analyst assign them to one level or another? These queries go beyond the scope of the present work but will no doubt furnish interesting and

helpful insights when pursued.

[10] It is this feature of an obligatory kahi and an optional tae which indicated the analysis of a discontinuous morpheme rather than an introducer and a relator. In permutations it is common for an introducer to become obligatory, but nowhere does the description allow for an optional relator. By calling the kahi...tae a discontinuous morpheme in relator position, we can say that a relator is always obligatory, but when the exponent of the base is an imperative clause, the first member of the relator becomes the obligatory part and the second member the optional part.

[11] Further investigation will very likely reveal this sentence type to be a truncated variety of the temporal Correlative Sentence, but for the present study it is being treated as a type in its own right.

APPENDICES

A. Maithili Phonemes and Their Orthographic Representation

1. Consonants

Phonemes

stops vl	p	p^h	t	t^h	ṭ	$ṭ^h$	tš	$tš^h$	k	k^h
vd	b	b^h	d	d^h	ḍ	$ḍ^h$	dz	dz^h	g	g^h
fricatives			s							h
nasals	m	m^h	n	n^h						ŋ
liquids			l	l^h			r	r^h		
glides	w						y			

Orthographic Conventions

stops vl	p	ph	t	th	T	Th	ch	chh	k	kh
vd	b	bh	d	dh	D	Dh	j	jh	g	gh
fricatives			s							h
nasals	m	mh	n	nh						ng
liquids			l	lh			r	rh		
glides	w						y			

BEST COPY AVAILABLE

2. Vowels

Phonemes					Orthographic Conventions				
[illegible]		u			i		u		
e	ə	o	$ə^{i}$	$ə^{u}$	e	a	o	ai	au
æ	a	ɔ			ae	ä	ɔ		

3. Other Conventions

Phonemic nasalization is indicated as Ṽ and length is presented as a double letter. Palatalization is written as Cy and labialization as Cw.

B. Abbreviations

AD	adjunct
adv	adverb
Alt	alternative
AR	axis-relator
B	base
BiDi	bi-directional
c	correlative
cj	conjunction
Cl	clause
cntf	contrafactual
Conc	concessive
Cond	condition
Conn	connector
Cont	contrast
Copl	coupling
cpt	composite
c-t-e	contrary-to-expectation
d	dependent
emph	emphasis
F	final
In	independent
indic	indicative
Init	initial
INT	introducer
introg	interrogative
L	link
MAR	margin
mkr	marker
n	unknown quantity
neg	negative
p	permuting
pos	positive
Prop	proposition
Purp	purpose
q	quantifier
quant	quantified
Quest	question
Reit	reiteration
rel	relative
Resn	reason
Resp	response
Rslt	result
s	subordinate
Sig	signal
Spec	specific
Stat	statement

Notation for Simultaneous Representation of Grammatical and Sememic Components in Connected Discourse[1]

Burkhard Schöttelndreyer and Kenneth L. Pike

CONTENTS

I. ANALYSIS OF A SIMPLE CLAUSE 322
  A. Discussion of the Tree Diagram for the Simple Clause. 322
    1. The Subject Tagmeme of the SemiStative Clause. 323
    2. The Site Tagmeme of the SemiStative Clause . . 324
    3. The Predicate Tagmeme of the SemiStative Clause 325
  B. Linear Representation of the Simple Clause. 326

II. ANALYSIS OF A MORE COMPLEX CLAUSE 328
  A. Discussion of the Tree Diagram for a More Complex Clause. 328
    1. The Predicate Tagmeme of the BiTransitive Quotative Clause 329
    2. The Subject Tagmeme of the BiTransitive Quotative Clause 328
    3. The Object Tagmeme of the BiTransitive Quotative Clause 328
    4. The Indirect Object Tagmeme of the BiTransitive Quotative Clause. 331
    5. The Initial Adjunct-as-Time Tagmeme of the BiTransitive Quotative Clause. 332
    6. The Second Adjunct-as-Time Tagmeme of the BiTransitive Quotative Clause. 333
    7. The Adjunct-as-Associated-Activity Tagmeme of the BiTransitive Quotative Clause 334
    8. The Adjunct-as-Locative Tagmeme of the BiTransitive Quotative Clause. 335
  B. Linear Representation of the More Complex Clause. . 335

III. ANALYSIS OF A SENTENCE. 338

A. Discussion of the Tree Diagram of the Condition Sentence 338
B. Linear Representation of the Condition Sentence. . 341

IV. ANALYSIS OF A PARAGRAPH. 342
A. Discussion of the Tree Diagram for the Aperture Paragraph. 342
B. Linear Representation of the Aperture Paragraph. . 343

V. ANALYSIS OF A DISCOURSE. 343
A. Discussion of the Tree Diagram of the Discourse. . 349
B. Linear Representation of a Narrative Discourse . . 349

VI. LINEAR REPRESENTATION OF THE COMPLETE TEXT 349

REFERENCES. 357

FOOTNOTES 357

APPENDIX. 358
A. Abbreviations. 358

This is an attempt first of all to write linear text while representing both sememic and grammatical components and to retain in the notation certain information that a native speaker finds recoverable; and secondly to show elements by means of this notation.

By using a six-box arrangement with columns for function, category, and instance, but rows for grammatical and sememic structures, we will display language data through:

1) constituent tree diagrams with four-box or six-box entries at the nodes;
2) linear representation of the same data.[2]

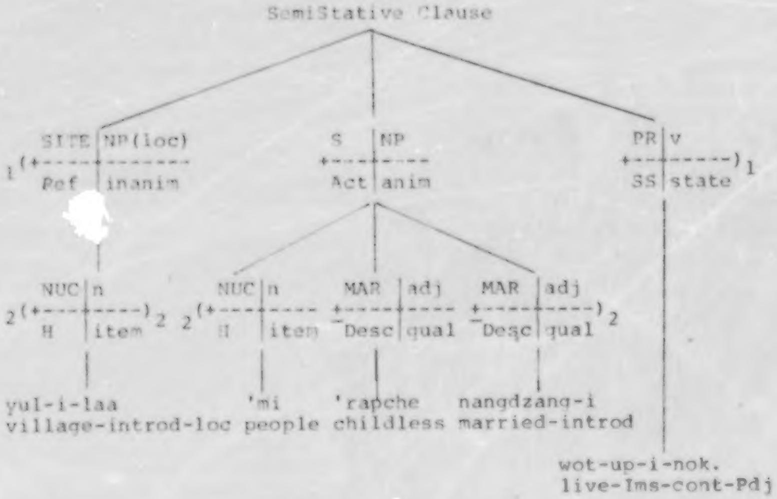
I. ANALYSIS OF A SIMPLE CLAUSE

Taking a simple clause and each of its tagmemes one at a time we will illustrate and comment on problems as they arise:

A. Discussion of the Tree Diagram for the Simple Clause

Note that each node has a four-box entry including general function and category of grammatical (Boxes 1 and 2) and sememic (Boxes 4 and 5) structures.

The morpheme sequence being analyzed (Box 3), and its conceptual nature as suggested by translation into English (Box6) are given at the end of the derivation of each branch of the tree (see Figure 1).


SemiStative Clause
SITE | NP(loc)
Ref | inanim
S | NP
Act | anim
PR | v
SS | state
NUC | n
H | item
NUC | n
H | item
MAR | adj
Desc | qual
MAR | adj
Desc | qual
yul-i-laa
village-introd-loc
'mi
people
'rapche
childless
nangdzang-i
married-introd
wot-up-i-nok.
live-Ims-cont-Pdj

In a certain village lived a childless married couple.

Figure 1. Tree Diagram of a SemiStative Clause.

1. The Subject Tagmeme of the SemiStative Clause

The N(oun) P(hrase) filling the S(ubject)-slot breaks down on phrase level into a NUC(leus) and two MAR(ginal) tagmemes. We could have gone further with the tree diagram, by amplifying it to map every complex word down to a lower level. (See sample analysis of the Site tagmeme below.)

The sememic components include functions such as Act(or) and sememic class such as anim(ate). Note that Box 1 notation is in full caps; Box 5 is in lower case; Box 4 begins with upper case and ends with lower case; while Box 2 uses upper case initial letter for elements of the phrase level or above, but lower case for word level or below.

In the node below the subject tagmeme, the nuclear tagmeme is filled by a n(oun) functioning semantically as H(ead). Similarly the MAR(gins) are filled by adj(ectives) functioning as Desc(riptive), or qual(ity) types.

A key to other abbreviations used below is to be found in the appendix at the end of this paper.

2. The Site Tagmeme of the SemiStative Clause

The Site tagmeme is expanded here as a single tagmeme on the next lower layer, rather than as a sequence such as was the case for the subject tagmeme. The reason is that this particular Site tagmeme is manifested as a noun phrase which consists of that one word whereas other instances of noun phrase filling the same Site slot may contain several words. Unary expansion of a node is possible whenever there is only one obligatory tagmeme in the tagmemic formula which gives the expansion possibilities for that particular node. The presence of a unary expansion usually implies the possibility of at least a binary expansion through the choice of an optional tagmeme. This has a theoretical implication: that the one item chosen in a unary expansion is simultaneously functioning on two levels--in this instance on the level of word and at the same time on the level of phrase.

The tree, then, is of an underlying constituent type showing the fashion in which a constituent breaks down or expands into units at successively lower levels. But in addition it shows the multi-level function of some of the elements, in which one element simultaneously fills slots on two levels. But there is a further situation in which an element may function on more than one level. A suffix, or element, on one level may serve as a signal that the larger unit of which it is a part is distributed in a specific place in a unit which is located one or more levels above it. In the Site tagmeme, for example, the noun phrase is of a particular sub-variety which is marked as an introd(ucer) or loc(ative) by the included suffixes. But these suffixes also tell us something about its relation to discourse structure.

When a morpheme within a word characterizes or constrains a construction two or more nodes above it, an indication of that element is given, in this notation, at the lowest node at the tree and is repeated upwards through the nodes until it reaches the highest point under attention. At that point commentary is needed to show how the low-level item conditions the higher-level item in its distribution or function. That is, a low-level constituent (say a morpheme) may affect the grammatical slot which an intermediate level unit (clause) can fill on a still higher level (say discourse). That is, the function of an intermediate unit in a slot of a high-level unit may be determined by an element of a low-level unit.

Such elements need further study since from the point of view of an abstracted formula of the lower or intermediate levels, the morpheme involved is treated as optional. When discourse studies are in view, however, the same clause occurring in the introduction of the discourse may have such a morpheme obligatorily; in this case the clause formula with an obligatory embedded morpheme will comprise an allo-construction--a conditioned variant of a normal or basic pattern--with discourse function as the conditioning circumstance.

Similarily the word construction would have allo-formulas with and without the optional suffix, since such allo-constraints would be repeated on every level until a particular level causing the condition were reached.

In this particular notation we indicate, tentatively, this conditioning element only at the uppermost level which causes the constraint. It is assumed that in a grammar the consequences would be traced out through the intermediate formulas.

This implies, on theoretical grounds, that certain structural constraints--expressible formally on one level, have an impact which is not exhausted within a single level, but is rather multilevel in nature. This problem is being investigated separately by Pike and Pike in connection with the English verb phrase.

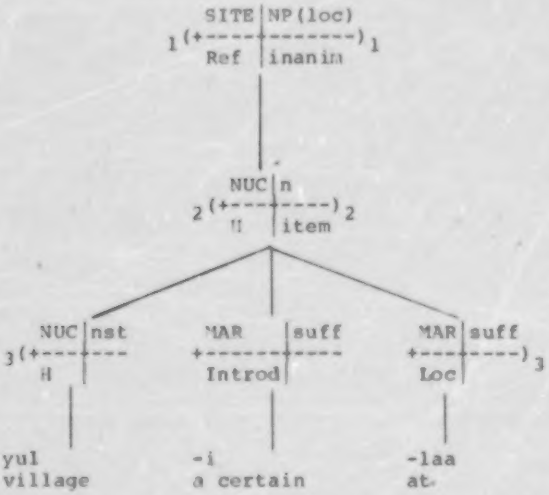
In Figure 2, for example, there is a morpheme *-laa* 'loc' which is part of an obligatory MAR(ginal) tagmeme. But this marginal tagmeme is here obligatory only by virtue of its position as a Box 2 constituent of the Site tagmeme (at the top of the diagram). Similarily, the *-i* 'a certain' in Figure 2 will be referred to by a modifying tag (see the item called introd(uction) in Box 2) at the level of discourse (see Figure 11) where the introducer is necessary at the beginning of that discourse, and this will account for the obligatory status of *-i* in Figure 2.

On the other hand, both of these suffixes in Figure 2 could have been treated as optional if the word had been given in its more basic general form, apart from the clause and discourse contexts, which make them obligatory here. In other words, the plus which occurs before each of the two marginal tagmemes in Figure 2 carries with it the requirement that in a full grammar this construction type have two allo forms--the basic form with optional suffixes and the conditioned form with required ones. Elements, which are quite optional from the point of view of a given constituent turn out to be quite obligatory when that constituent is used to perform certain higher level functions. When this leads to slightly different formulas, identical except for + vs. ± on the margin, the more widely distributed one is treated as the norm of the emic construction, and the other is treated as an allo-construction with distributional constraints. This kind of etic vs. emic relationship between constructions does not show up explicitly in this six-box constituent tree notation, but must be given in any grammar which attempts to classify and discuss the emic constructions in general terms.

3. The Predicate Tagmeme of the SemiStative Clause.

Since the Predicate tagmeme of Figure 1 does not appear to be expandable by marginal tagmemes, it is not represented on the phrase level, but is linked to the word level directly without an intermediate phrase node.

The verb *wot-up* 'to live, exist, reside' is a stative verb which is used in the setting paragraph of a narrative or in the setting of any event paragraph. It has been classified as Semi-Stative because of the required actor and referent.[3] The referent



In a certain village

Figure 2. Tree Diagram of the Site Tagmeme.

here is a bound locative.

B. Linear Representation of the Simple Clause

After a clause is analyzed in terms of a constituent tree of this type, the same data may be represented in linear fashion without loss of any of the information given in the tree. If the tree formula ends at the word--or any other level--so will the linear representation.

At the end of this section, note, for example, the linear representation of data from Figure 1. The highest level, without embedding, has tagmemes of Site, Subject, and Predicate. These are all enclosed within a single set of parentheses preceded and followed by subscript 1 to indicate that layer.[4] Compare the same subscript number in Figure 1. Then, within that starting pair of parentheses is the 4-box representation of the Site tagmeme, but without a closing parenthesis. A subscript 2 introduces and closes the phrase within that Site tagmeme. Since that phrase, unexpanded, is simultaneously word level; and since this particular chosen representation stops at word level; one finds the full six boxes inside the parentheses with subscript 2, with Boxes 3 and 6 giving vernacular yul-i-laa and its translation 'village-introd-loc' respectively. The Subject tagmeme then follows without a further parenthesis since it is already on the same layer as the Site tagmeme. But the Subject tagmeme, like the Site tagmeme, is given with only the four boxes since the vernacular with its translation will not occur until the terminal layer (arbitrarily chosen) is reached.

The four boxes of a node which dominates a string of nodes below it will precede that string--but the parentheses of the upper node will not close until everything which it dominates has been given. Thus the Subject node begins before the nucleus 'mi 'people,' while the closing parenthesis (appropriately numbered) occurs after the last marginal element. Only one pair of parentheses enclose the string of constituents at a given layer in a given construction. For example in the clause enclosed in parentheses in Figure 1 the Subject has no parentheses immediately surrounding it.

When a string of embedded tagmemes occurs later in the connected text, and a parenthesis is closed by a certain layer number, the tagmeme following it can be interpreted as being represented by that same number minus one. That is, if the parenthesis closes in 2, then in

```
1(--|-- 2(--|-- --|-- --|--)2 --|-- --|--)1
```

the 4-box element immediately following subscript 2 will be on Layer 1. For example after the embedded yul-i-laa 'village-introd-loc' which closes with subscript 2, the unnumbered Subject tagmeme will be two-minus-one which puts it on the same layer with Site tagmeme which began the Layer 1 string of tagmemes on the clause level. This notation is valid to any depth of embedding.

A warning regarding the initial start of the material which is labelled Layer 1: the highest layer under temporary consideration will normally be labelled as Layer 1. If at some later stage in the analysis higher layers are considered, the numbering will have to be revised. Thus this clause, treated here as Layer 1, gets renumbered as Layer 4 when it is embedded in the full linear text of Section VI.

```
   SITE|NP(loc)     NUC|n    |yul-i-laa
 1(+----+-------  2(+---+-----+------------------)2
   Ref |inanim       H  |item|village-introd-loc

 S  |NP         NUC|n    |'mi      MAR |adj |'rapche
+---+----    2(+---+-----+------  +----+----+---------
 Act|anim        H  |item|people  -Desc|qual|childless

 MAR |adj |nangdzang-i              PR|v    |wot-up-i-nok
+----+----+---------------)2      +--+-----+-----------------)1
-Desc|qual|married-introd          SS|state|live-Ims-cont-Pdj
```

Figure 3. Linear Representation of the Site Tagmeme.

II. ANALYSIS OF A MORE COMPLEX CLAUSE.

A. Discussion of the Tree Diagram for a More Complex Clause

Consult Figure 4 for data concerning which the following comments are made:

1. The Predicate Tagmeme of the DiTransitive Quotative Clause

In the clause of Figure 4 (vs. Figure 1) the verb phrase level is included since, in addition to the nuclear verb, an optional participle margin is also present.

A detailed analysis of the relation of the participle to its nuclear verb is not appropriate to our aim here which is to deal with notation and constituent breaks rather than range or quality of constituents which can fill any tagmemic function. For these matters the reader must consult the clause paper--or, for special problems, other papers in preparation. (Our constituent tree here is a derivational tree, giving only the constituent analysis of the one item in its particular context. If one wishes to see the systemic analysis, one must consult the places in a tagmemic grammar where the various constructions are listed with their respective tagmemic sequences; then each construction optionally filling one of the tagmemes of such a sequence must itself be studied in terms of its expansions etc. By the latter device one gets the kind of results which have a partial analogue in the phrase structure rules of transformational grammar.) In this particular instance, however, we merely add: The word 'si-N 'saying' has been treated as the MAR(gin) to the predicate Ti-nok 'ask-Pdj' since we assume that this is a special V(erb) P(hrase) type in the performative VP class. Box 2 of the tagmeme above 'si-N 'saying' is labelled: ptc/ss, which reads: participle with same subject as the verb. No independent subject of the participle is permitted.

2. The Subject Tagmeme of the DiTransitive Quotative Clause

Here again a single node results because the lower level is expandable but single in this example (Figure 4); see discussion of Site tagmeme, Section I. A. 1.

3. The Object Tagmeme of the DiTransitive Quotative Clause

1) The Object slot is filled by an Independent Transitive Clause: IndepTCl. Here we have a performative type which differs from ordinary transitive clauses where the Object slot will be filled with a NP. A discourse of any length--or word, phrase, clause--can come here.

Note that in the embedded clause of the Object only three tagmemes are present: S(ubject), O(bject), and PR(edicate). Each of these in turn is in one-word form. Yet each of these in principle may expand, as discussed concerning this notation above.

Note that in this particular context we are assuming that neither the Subject pro(noun) nor the Object interrogative pro(noun) nor the Dependent Verb are modifiable by other words (as evidenced by the lack of a further node).

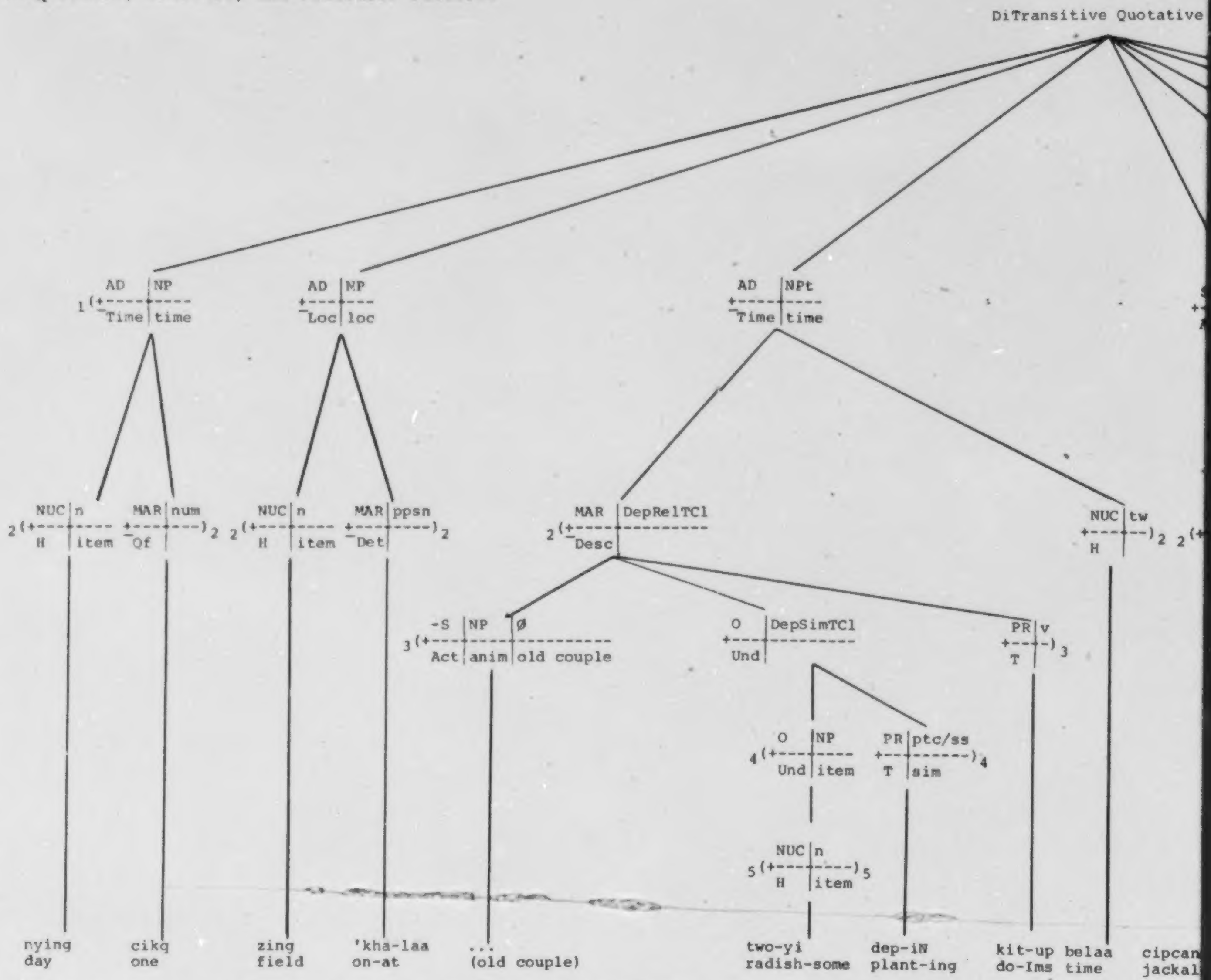
If this assumption proves to be wrong, then between the three tagmemes indicated and the word level there would need to be amplification at the phrase level.

2) Note the zero-filler of the Subject slot of the dependent Clause embedded in the main Object slot. For convenience we have put the zero in Box 3 at the node even though in principle this is not necessary to this notational scheme since it is fully represented by the empty dots in the vernacular representation at the bottom of the chart. The extra box in the tree is merely a warning against oversight and an attempt to make sure that the reader sees that *the dots* in the vernacular representation *are structurally relevant zeros* in the reference to the total notational system.

A further problem here, however, is that the meaning referend is "old couple," as shown in Box 6 at the node and in parentheses in the translation at the bottom of the chart, but that the vernacular form which will be allowable here is not the NP "old couple" but is rather a pronoun "you." This factor is completely recoverable from the node representation if one sees both Pro(noun) in Box 2 and its conceptual translation in Box 6. Without both of these two components, however, the material is not recoverable.

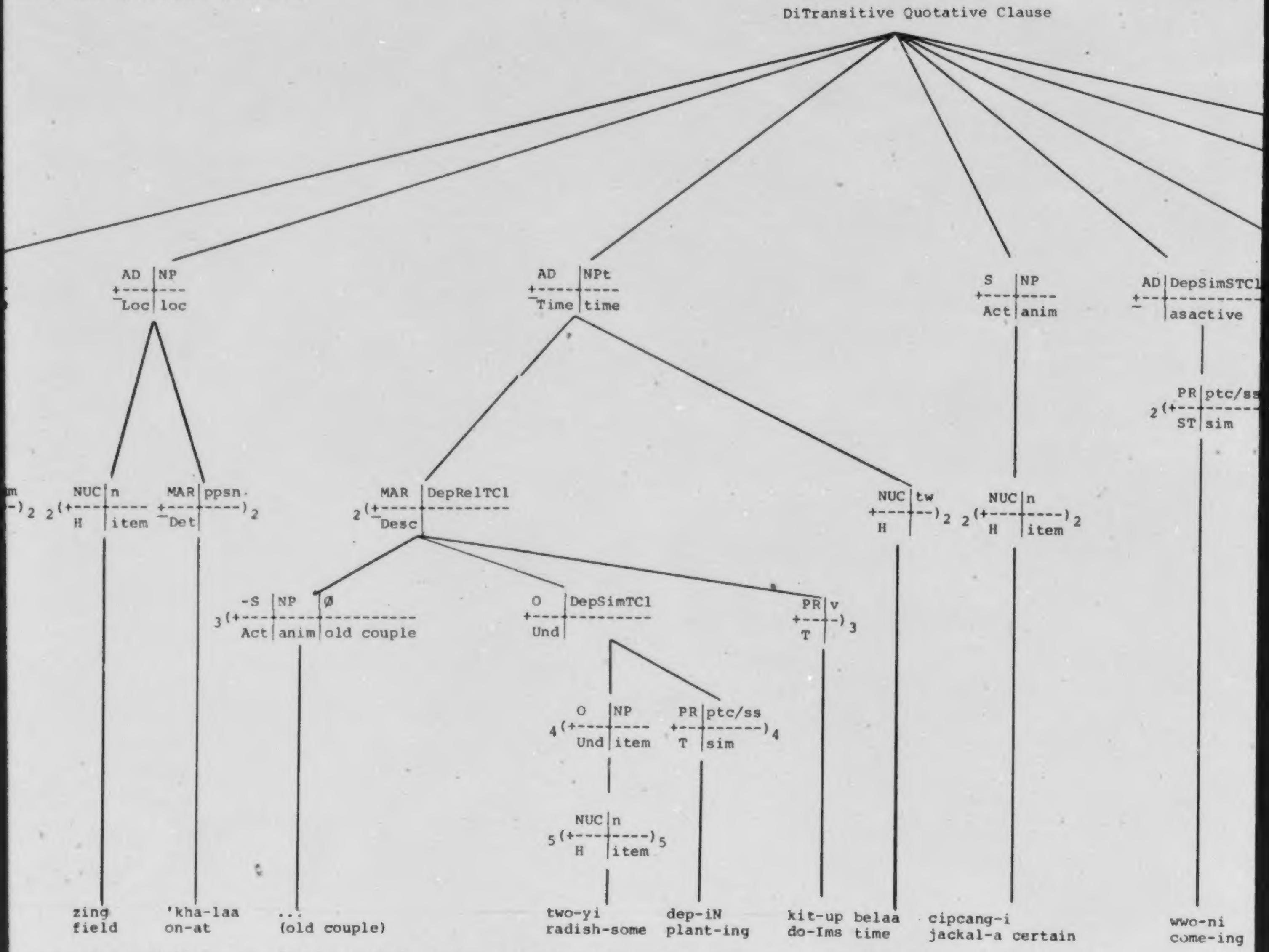
4. The Indirect Object Tagmeme of the DiTransitive Quotative Clause

The I(ndirect) O(bject) is sememically obligatory, relative to the situation requirements represented by this clause, but with optional grammatical deletion (shown by zero in Box 6 of Figure 4). This requires some re-phrasing of the definition of optionality, relative to standard tagmemic treatment. Experientially-obligatory occurrence is shown by the plus (+) sign before the Indirect Object tagmeme as a whole; but the possibility of optionality, in general formula, is shown by a plus-minus (±) symbol put on the upper row just before Box 1. Since, however, this is a derivational tree--not a systemic formula as a whole--, and since in this particular instance the minus-option is exercised, we therefore have minus in the grammatical row immediately preceding the symbol for Indirect Object. This tells us that the vernacular item is deleted (note the zero in Box 3), but that the reader should assume that an Indirect Object is present in the situation. This kind of situation (with optionality only on the upper row of the two row representation) contrasts with optionality which is shown for the tagmeme as a whole. Note,


DiTransitive Quotative
AD | NP
1(± Time | time
AD | NP
± Loc | loc
AD | NPt
± Time | time
NUC | n
2(+ H | item
MAR | num
± Qf |)2
NUC | n
2(+ H | item
MAR | ppsn
± Det |)2
MAR | DepRelTCl
2(± Desc
NUC | tw
+ H |)2
-S | NP | Ø
3(+ Act | anim | old couple
O | DepSimTCl
+ Und
PR | v
+ T |)3
O | NP
4(+ Und | item
PR | ptc/ss
+ T | sim)4
NUC | n
5(+ H | item)5
nying
day
cikq
one
zing
field
'kha-laa
on-at
...
(old couple)
two-yi
radish-some
dep-iN
plant-ing
kit-up
do-Ims
belaa
time
cipcan
jackal

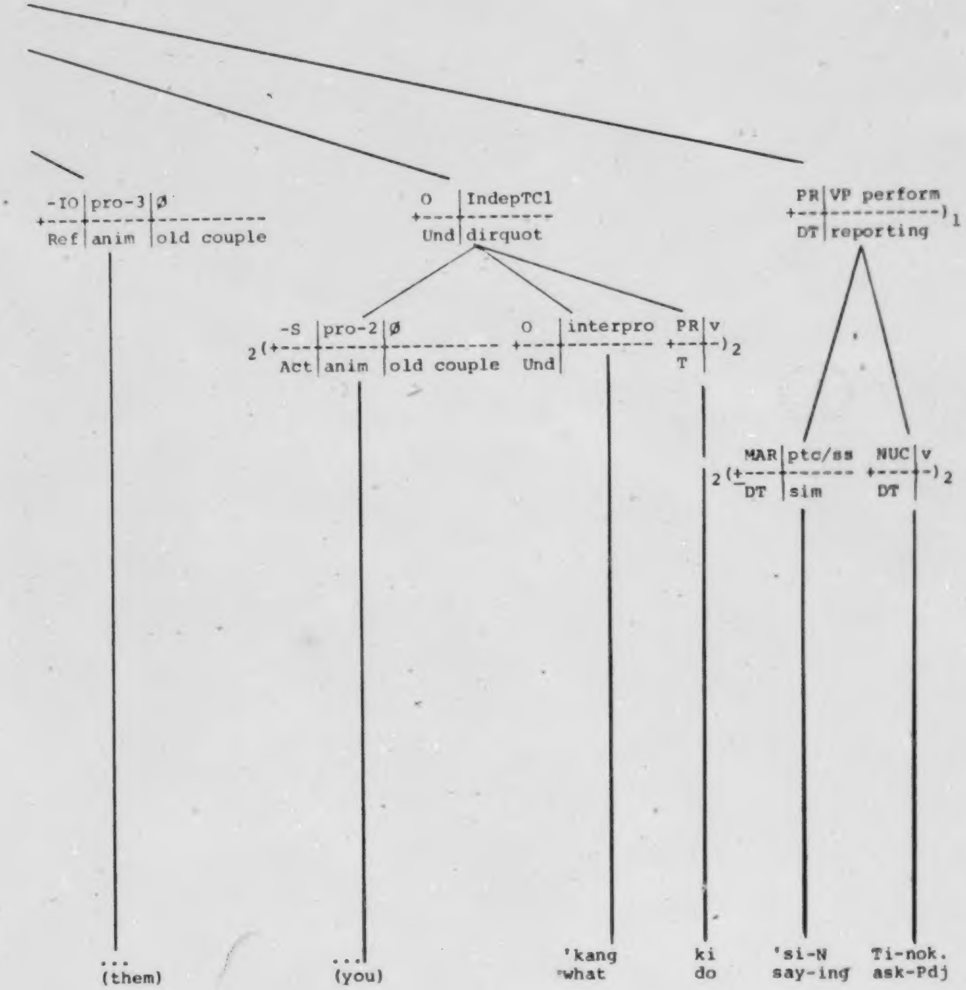
One day at the time of planting radishes on the field a jackal, coming, asked (them) saying, "What are (you) doing?"

Figure 4. Tree Diagram of a DiTransitive Quota

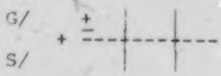

DiTransitive Quotative Clause
AD | NP
± Loc | loc
AD | NPt
± Time | time
S | NP
+ Act | anim
AD | DepSimSTCl
± | asactive
PR | ptc/ss
2(+ ST | sim
m
-)2
NUC | n
2(+ H | item
MAR | ppsn
± Det)2
MAR | DepRelTCl
2(± Desc
NUC | tw
+ H)2
NUC | n
2(+ H | item)2
-S | NP | Ø
3(+ Act | anim | old couple
O | DepSimTCl
+ Und
PR | v
+ T)3
O | NP
4(+ Und | item
PR | ptc/ss
+ T | sim)4
NUC | n
5(+ H | item)5
zing
field
'kha-laa
on-at
...
(old couple)
two-yi
radish-some
dep-iN
plant-ing
kit-up belaa
do-Ims time
cipcang-i
jackal-a certain
wwo-ni
come-ing

of planting radishes on the field a jackal, coming, asked (them) saying, "What are (you) doing?"

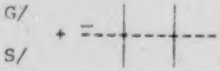
Figure 4. Tree Diagram of a DiTransitive Quotative Clause.


-IO | pro-3 | Ø
Ref | anim | old couple
O | IndepTCl
Und | dirquot
PR | VP perform
DT | reporting
1
-S | pro-2 | Ø
Act | anim | old couple
2
O | interpro
Und
PR | v
T
2
MAR | ptc/ss
DT | sim
NUC | v
DT
2
...
(them)
...
(you)
'kang
what
ki
do
'si-N
say-ing
Ti-nok.
ask-Pdj

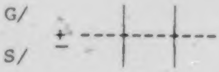
that these notations, in abstract form, differ as follows:



for sememically obligatory, grammatically deletable; but



for a specific single derivation where the minus choice is exercised; as opposed to



for optionality of a tagmeme as a whole.

5. The Initial Adjunct-as-Time Tagmeme of the DiTransitive Quotative Clause

Note the redundancy in Boxes 4 and 5. This is considered a benign redundancy. (This does not destroy the validity of the system but is rather one of the diagnostic indicators that we are dealing with a peripheral tagmeme rather than with a nuclear one.)

But the question arises: Why isn't this to be treated as plus or minus precisely of the kind we had in Section 4, where plus referred to the tagmeme as a whole and plus or minus referred to the grammatical vernacular occurrence. Question: Isn't it a fact that in the situational environment, time always somehow or other has to be lurking in the background? To this our reply is the following:

Every utterance occurs at some time--and one might argue that the tagmeme of Time should also, therefore, be represented as plus in general, but with plus-minus in the grammatical row.

The difficulty with adopting this conclusion is that there is still a substantial difference between the two. The time situation is peripheral to clauses as a whole, in that it may come with a large number of different clause construction types. In this sense it is not diagnostic of the construction--and in this sense it is not obligatory to it. On the other hand, the Indirect Object tagmeme which we have been discussing is explicitly needed for the full expansion of the DiTransitive clause, and is diagnostically relevant to it since it helps differentiate this clause from others such as Transitive. It is in this contrastive sense, perhaps, that we must ultimately argue that we want to keep the notations for the two separate.

There are other differences between nuclear and peripheral tagmemes which are not the subject of this paper. Among them, however, will probably appear to be a much greater redundancy in the peripheral tagmemes. For example in the Time tagmeme note that time enters explicitly into both Box 4 and Box 5--both as function and as class. In addition it often enters into the fact--as illustrated by the second of the two Time tagmemes in the clause--that the Noun Phrase itself must be of a time subclass (note the subscript t). It is just this kind of redundancy which contrasts peripheral and non-peripheral tagmemes. One does not find, otherwise, the normal occurrence of the same feature both in Box 4, Box 5, and Box 2. Thus the two kinds of tagmemes--Indirect Object and Time--must be differentiated in some sense. Hence, even although the situation of definition of obligatoriness, by itself, might be dubious, the overall requirement is to separate the two tagmeme types. This the notation does, and hence we retain it without further discussion.

6. The Second Adjunct-as-Time Tagmeme of the DiTransitive Quotative Clause

1) This tagmeme is the same as the first Time tagmeme except for two constraints on the subtype of NP: 1) a special kind of time phrase occurs in the second of the two time tagmemes, as we have already mentioned in the preceding section, and 2) the second class does not allow the determiner 'ti 'that' to follow it.

2) In the MAR(gin) of the Second Time Clause, the one in which the filler of Box 2 is NPt, note that the breakdown on the node below it, in Layer 2, includes a MAR(gin) which is filled by a dependent clause. Thus this clause is specifically filling a phrase level slot. Contrast this kind of structure with the fact that a clause can fill a clause level slot--as seen in Layer 1, with the Object of the DiTransitive Clause as a whole, which has an independent clause filling that Object slot. In other words, clauses may be embedded within clauses--or clauses may be embedded within phrases. In the one instance here the clause is embedded within a phrase which is embedded within a tagmeme of the clause; and in the second instance the clause is embedded directly in a tagmeme on the upper layering of that clause itself.

3) A full grammar might pick out all such dependent clauses, classify them, and discuss them in a chapter dedicated to dependent clauses of various kinds. Once more, we indicate that this is beyond the purview of a constituent tree representation.

4) We turn again to the same place--to Layer 3 under the Time tagmeme with NPt. On that layer note the Subject tagmeme. There, in Box 3, we again find a type of zero. In this case as in the Layer 2 under the clause object, Box 6 indicates that the concept involved is "old couple"--and in each case we wish this to be recoverable. In the present instance, however, we do not wish to recover it in the form of the pronoun you (which was the form needed for the clause object) but we wish to recover it

explicitly in the form of old couple. This is indicated by the notation because of the different fillers of Box 2 in the two tagmemes involved. Under the clause object, the zeroed-out subject had pro(noun)-2 in Box 2. Here (in Box 2 of the Subject tagmeme of the Dependent Clause embedded in the Time tagmeme) we find the symbol NP (noun phrase). It is this which tells us that couple is recoverable.

5) We have discussed the Dependent Clause under the Time tagmeme, at Layer 2. Within Layer 2, however, the breakdown on Layer 3 includes an object, for which Box 3 again has a dependent clause indicated--this time Dependent Simultaneous Action Transitive Clause. On Layer 4 this is in turn broken down to object and predicate.

That is, the MAR(gin) of the time phrase has embedded within it a clause: "The old couple was doing something"; then embedded in the object of that clause, representing the "something" of the object, is the further dependent clause: "planting radishes."

6) Within the second embedded clause, on Layer 4, the predicate tagmeme has a participle as its Box 4 filler, and within the participle is a form which states that the same subject (ss) is involved. We will assume that in such circumstances the sameness constraint is limited to adjacent layers in the tree (here Layer 4 within Layer 3). We will assume that it is not required to be the same subject as the subject of the ultimate matrix clause (Layer I) unless some more extensive evidence shows up in a particular case.

In the general case, the subject of the embedded clause is the same as the subject of the embedding clause, and this is marked as indicated on the predicate of Layer 4. Occasionally, however, (see Sentence 7 of sample text of Section VI), the two subjects are different. In this case, the subject of the matrix clause is marked in the vernacular to warn the reader that it is not the same as that of the embedded clause which accompanies it.

7. The Adjunct-as-Associated-Activity Tagmeme of the DiTransitive Quotative Clause.

In a further tagmeme of Layer 1--the Adjunct-as-Associated-Activity--there is an additional embedded dependent clause. In this instance no independent subject is permitted, as can be seen in Layer 2 where subject is absent. If there had been such a subject, but it had been zeroed-out, then in the formula for Layer 2, there would have been a plus tagmeme with a minus grammatical level. In addition, no further expansion of the verb phrase is currently known to us.

8. The Adjunct-as-Locative Tagmeme of the DiTransitive Quotative Clause.

1) See discussion of Initial Adjunct-as-Time Tagmeme above.

2) We have not yet filled in Box 5 of the marginal tagmemes on Layer 2. Our tentative hunch is that some kind of transformations, elements of Box 5 would be important, invariant, and perhaps somehow diagnostic. If this situation does develop in our analysis, then appropriate labels for Box 5 may be added.

Another strong probability is that Box 5 labels will have to be given to show various kinds of co-occurrence restrictions of a semantic nature across tagmemes. Therefore just as index symbols can be given in Box 2 for grammatical concord, so in Box 5 index symbols may have to be given for *semantic concord*. At this point the development of Box 5 remains *as one of the less* well understood components of the theoretical analysis. Here, however, it does not otherwise affect the general development of the notational devices either in tree form or in its linear representation. As the theory developes here the linear representation should follow directly.

B. *Linear Representation of the More Complex Clause.*

The rules for linear representation are the same as before. The principal difference is that in a complex tree the number of layers of embedding is much greater.

The length of the linear transcription would be much less if, whenever the nodes of the tree are not branching, one node were eliminated.

(Perhaps some of the "pruning" devices of the transformational grammarians would be analogous here. We leave this exploration for later development since we are not attempting to give a formal analysis of the relations between this and transformational trees.)

If it were the upper node which was chosen to be eliminated, however, the notation would lose a representation of the basic grammatical and sememic function of the item at that crucial upper level. The main subject for example would then just be represented as the nucleus of the NP, and its function both as subject and actor would be lost.

If, on the other hand, the lower node were to be eliminated, then in some complex instances, not present in this text, but to be discussed elsewhere, certain representations of dual structures, simultaneously present after transformation, could not be shown. Where dual structures are present, some phases of the structure are represented by the upper node, and other functional phases of the structure are represented by the lower node. We therefore in these instances preserve both nodes. In the meantime where loss of the lower node is not damaging, we delete it.

In order to see the effect of this upon a linear notation, see first Figure 5 in which the linear representation of the DiTransitive Quotative Clause of Figure 4 is given in linear notation. Note, for example, that Layer 2 (nucleus filled by noun) of Subject tagmeme, about two thirds of the way through the text, is preserved. Then compare this and other such non-branching nodes with the same clause represented linearly in Figure 6 where the single nodes are deleted. In Figure 2, on the other hand, the same subject tagmeme is given without the Layer 2 noun following it. There is another difference as well. In Figure 5 when the Subject tagmeme was followed by Layer 2, the vernacular <u>cipcang-i</u> is given in Layer 2, whereas in Figure 6 this <u>cipcang-i</u> is moved back on to the Subject tagmeme.

Since there is no node lower embedded in the notation at that point, it is this latter abbreviation which is the type we shall follow excepting in instances where double function may lead to specific difficulty under some special instances undefined here.

```
   AD  |NP        NUC|n    |nying    MAR|num|cikq        AD |NP
 1(±----+----   2(+---+-----+-----   ±---+---+----)2   ±---+---
   Time|time      H  |item |day      Of |   |one        Loc|loc

   NUC|n    |zing     MAR|ppsn|'kha-laa        AD  |NPt
 2(+---+-----+-----   ±---+----+--------)2   ±----+----
   H  |item |field    Det|loc |on-at         Time|time

   MAR |DepRelTCl        S  |NP        -NUC|n   |0
 2(±----+---------    3(+---+----   4(+----+----+----------)4
   Desc|                 Act|anim      H   |item|old couple

 O  |DepSimTCl       O  |NP        NUC|n   |two-yi
 +---+---------   4(+---+----   5(+---+----+-----------)5
 Und|                Und|item      H  |item|radish-some

 PR|ptc/ss|dep-iN            PR|v|kit-up        NUC|tw|belaa
 +--+------+----------)4     +--+-+------)3     +---+--+-----)2
 T |sim   |plant-ing         T | |do-Ims        H  |  |time
```

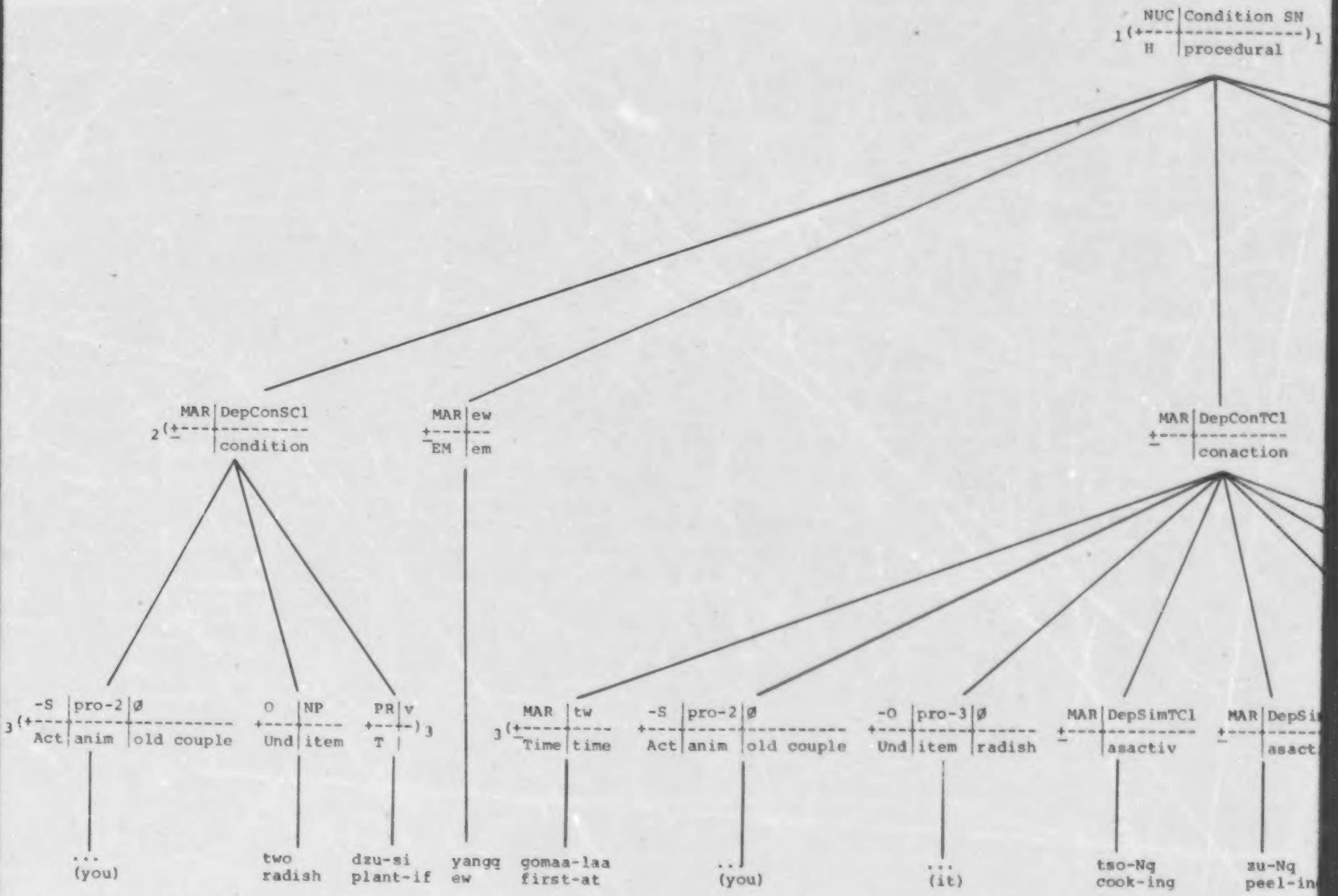
BEST COPY AVAILABLE

```
 S  |NP         NUC|n   |cipcang-i               AD|DepSimSTCl
+---+----    2(+---+----+-----------------)2    ±--+----------
Act |anim        H |item|jackal-a certain          |asactiv

   PR|ptc/ss|wwo-ni          -IO|pro-3|Ø              O |IndepTCl
2(+--+------+--------)2    +---+-----+----------    +---+--------
   ST|sim   |com-ing        Ref|anim |old couple    Und|dirquot

   -S |pro-2|Ø               O  |interpro|'kang    PR|v|ki
2(+---+-----+-----------    +---+--------+-----    +--+-+--)2
   Act|anim |old couple     Und|        |what      T | |do

 PR|VP perform        MAR|ptc/ss|'si-N       NUC|v|Ti-nok
+--+----------    2(±---+------+-------     +---+-+-------)2)1
 DT|reporting         DT|sim   |say-ing      DT | |ask-Pdj
```

One day at the time of planting radishes on the field a jackal, coming, asked (them) saying, "What are (you) doing?"

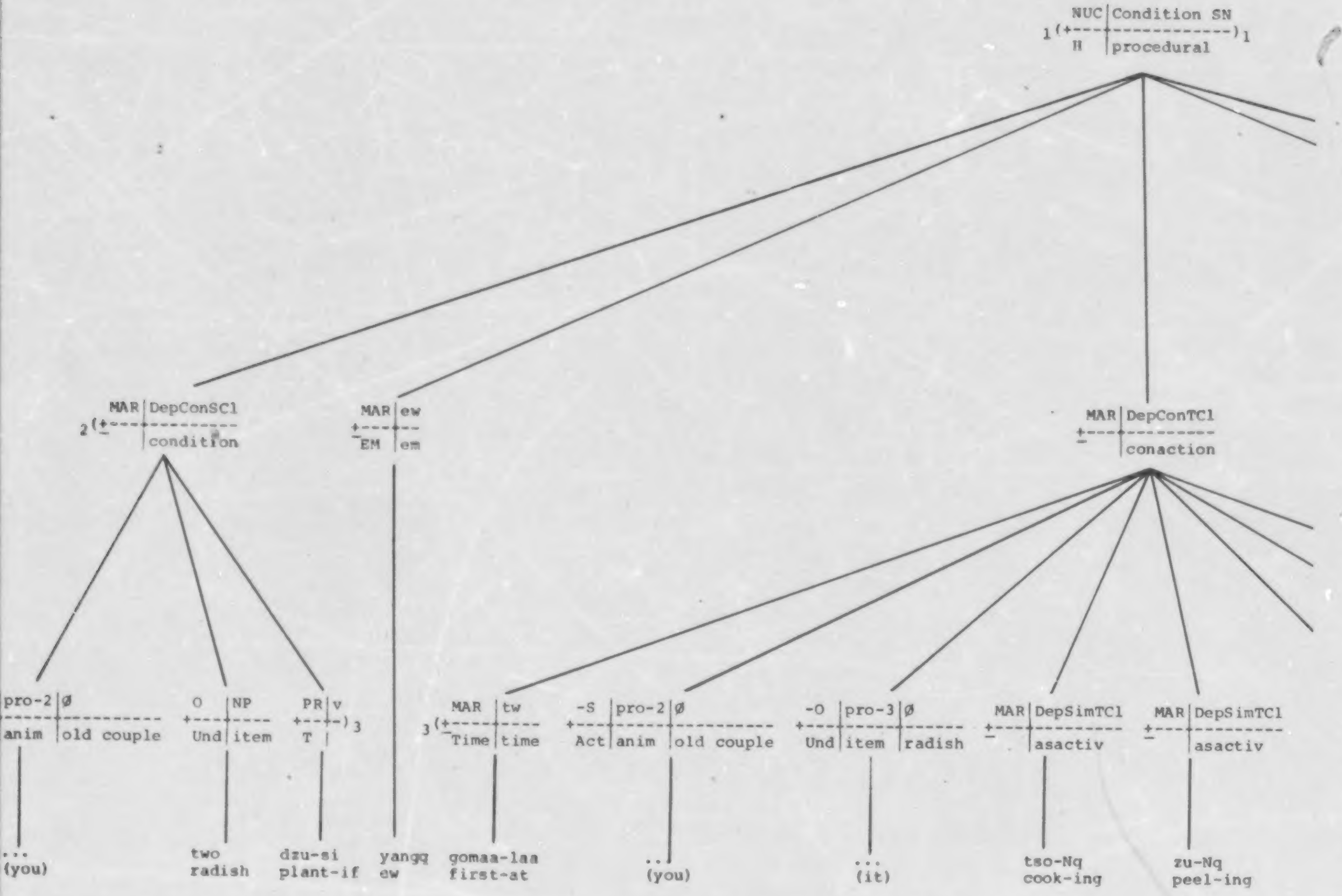
Figure 5. Linear Representation of a DiTransitive
Quotative Clause.
(retaining inner double function nodes)

```
   AD |NP          NUC|n   |nying     MAR|num|cikq        AD |NP
1(±---+----     2(+---+----+-----    ±---+---+----)2    ±---+---
   Time|time        H |item|day        Of|   |one          Loc|loc

   NUC|n   |zing       MAR|posn|'kha-laa          AD  |NPt
2(+---+----+-----     ±---+----+--------)2      ±----+----
   H  |item|field      Det|loc |on-at             Time|time

   MAR |DepRelTCl        -S |NP  |Ø                O  |DepSimTCl
2(±----+---------    3(+---+----+----------      +---+---------
   Desc|                Act|anim|old couple      Und|

   O  |NP  |two-yi                PR|ptc/ss|dep-iN
4(+---+----+-----------         +--+------+---------)4
   Und|item|radish-some          T |sim   |plant-ing

 PR|v|kit-up          NUC|tw|belaa          S  |NP  |cipcang-i
+--+-+------)3      +---+--+-----)2       +---+----+----------------
 T | |do-Ims          H  |  |time          Act|anim|jackal-a certain
```


NUC | Condition SN
1(+ H | procedural)1
MAR | DepConSCl
2(± | condition
MAR | ew
± EM | em
MAR | DepConTCl
± | conaction
-S | pro-2 | Ø
3(+ Act | anim | old couple
O | NP
+ Und | item
PR | v
+ T |)3
MAR | tw
3(± Time | time
-S | pro-2 | Ø
+ Act | anim | old couple
-O | pro-3 | Ø
+ Und | item | radish
MAR | DepSimTCl
± | asactiv
MAR | DepSi
± | asact
...
(you)
two
radish
dzu-si
plant-if
yangq
ew
gomaa-laa
first-at
..
(you)
...
(it)
tso-Nq
cook-ing
zu-Nq
peel-in

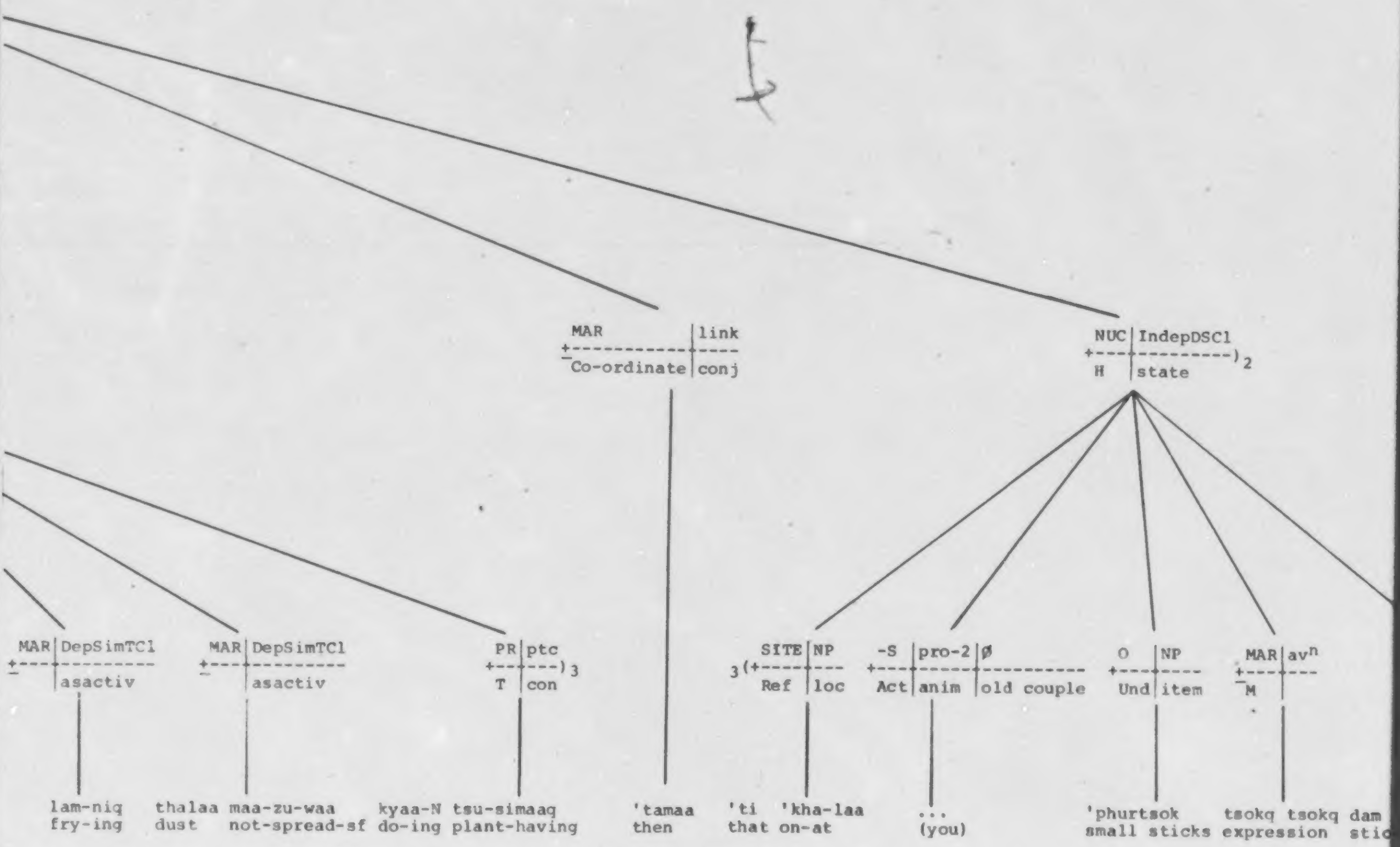
If you want to plant radishes, first you cook them, peel them, fry them, not covering them with soil plant them, then on top you mu

Figure 7. Tree Diagram of a Sentence.

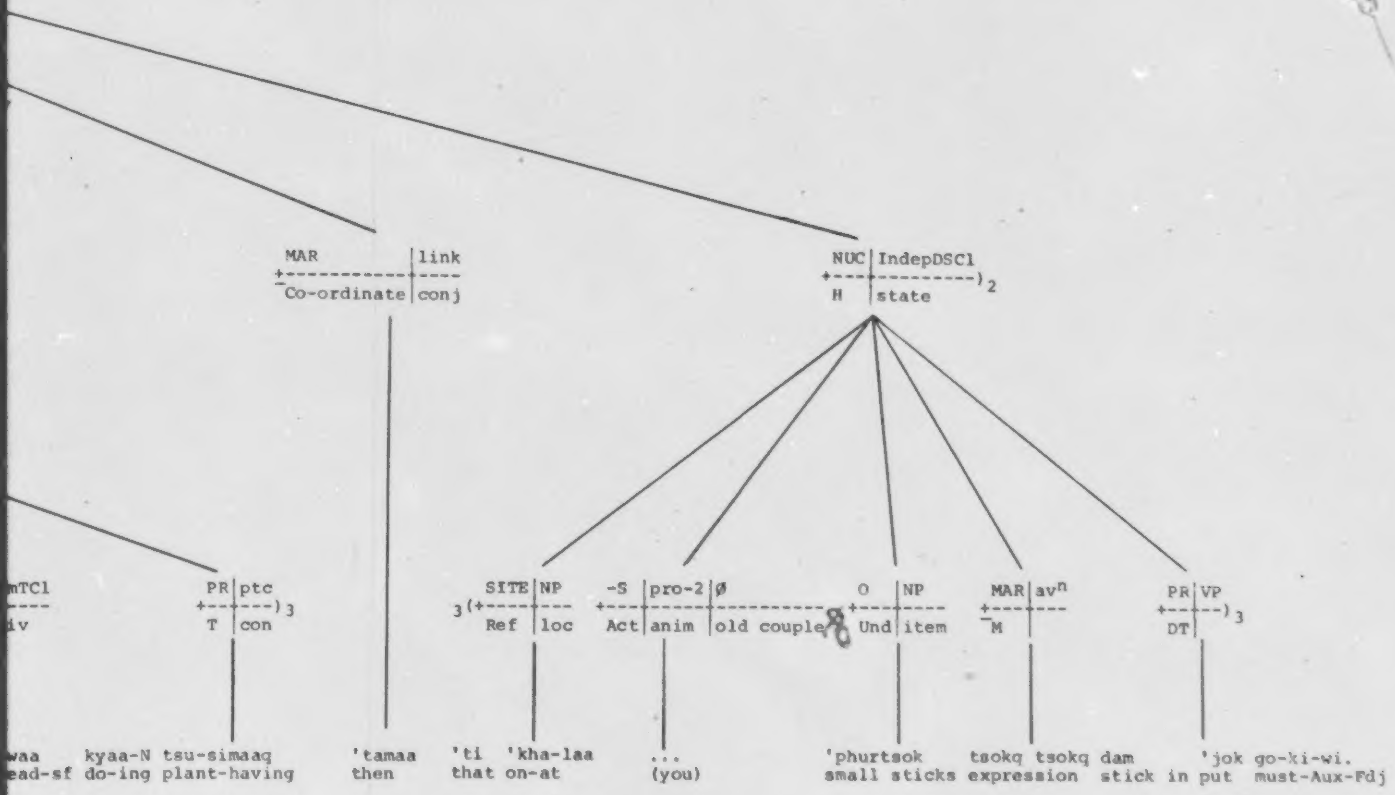

NUC | Condition SN
1(+---+-------------)1
H | procedural
MAR | DepConSCl
2(± ---+---------
condition
MAR | ew
±---+---
EM | em
MAR | DepConTCl
±---+---------
conaction
pro-2 | Ø
anim | old couple
O | NP
+---+---
Und | item
PR | v
+--+-)3
T |
MAR | tw
3(±---+---
Time | time
-S | pro-2 | Ø
+---+---+---------
Act | anim | old couple
-O | pro-3 | Ø
+---+---+------
Und | item | radish
MAR | DepSimTCl
±---+----------
asactiv
MAR | DepSimTCl
±---+----------
asactiv
...
(you)
two
radish
dzu-si
plant-if
yangq
ew
gomaa-laa
first-at
..
(you)
...
(it)
tso-Nq
cook-ing
zu-Nq
peel-ing

want to plant radishes, first you cook them, peel them, fry them, not covering them with soil plant them, then on top you must stick

Figure 7. Tree Diagram of a Sentence.


MAR | link
± Co-ordinate | conj
NUC | IndepDSCl
+ H | state)2
MAR | DepSimTCl
± | asactiv
MAR | DepSimTCl
± | asactiv
PR | ptc
+ T | con)3
3(+ SITE | NP
Ref | loc
-S | pro-2 | ø
+ Act | anim | old couple
O | NP
+ Und | item
MAR | av^n
± M |
lam-niq
fry-ing
thalaa
dust
maa-zu-waa
not-spread-sf
kyaa-N
do-ing
tsu-simaaq
plant-having
'tamaa
then
'ti
that
'kha-laa
on-at
...
(you)
'phurtsok
small sticks
tsokq tsokq
expression
dam
stic

in little sticks.


MAR | link
Co-ordinate | conj
NUC | IndepDSCl
H | state
)2
mTCl
iv
PR | ptc
T | con
)3
3(
SITE | NP
Ref | loc
-S | pro-2 | Ø
Act | anim | old couple
O | NP
Und | item
MAR | avn
M
PR | VP
DT
)3
waa
ead-sf
kyaa-N
do-ing
tsu-simaaq
plant-having
'tamaa
then
'ti
that
'kha-laa
on-at
...
(you)
'phurtsok
small sticks
tsokq tsokq
expression
dam
stick in
'jok
put
go-ki-wi.
must-Aux-Fdj

```
 AD     |ptc/ss|wwo-ni     -IO|pro-3|Ø              O  |IndepTCl
+-------+------+-------   +---+-----+----------    +---+--------
-Asactiv|sim   |com-ing    Ref|anim |old couple     Und|dirquot

   -S |pro-2|Ø               O  |interpro|'kang    PR|v|ki
2(+---+-----+----------     +---+--------+-----   +--+-+--)2
   Act|anim |old couple      Und|        |what     T |  |do

 PR|VP perform        MAR|ptc/ss|'si-N      NUC|v|Ti-nok
+--+----------    2(+---+------+-------   +---+-+-------)2)1
 DT|reporting        -DT |sim   |say-ing    DT |  |ask-Pdj
```

One day at the time of planting radishes on the field a jackal, coming, asked (them) saying, "What are (you) doing?"

Figure 6. Linear Representation of a DiTransitive Quotative Clause.
(eliminating inner double function nodes)

III. ANALYSIS OF A SENTENCE

As near as we can see at this point, the notational devices which were developed especially for the clause are equally applicable for the sentence. The notation awaits only the particular contrastive labels which must be provided by the appropriate analysis of the sentence system.

The problem of layers of embedding is the same as before. Similarly, there are problems of embedding of sentence within sentence--or even discourse within sentence or within clause, in the instance of quotation. The transition from the four or six-box representation of the nodes of the sentence to the linear handling of the sentence again is accomplished as before. No new theoretical problems concerning this have arisen thus far.

It is this fact which in part encourages us to believe that the notational system which we have been developing is far more general than that needed merely for the clause. It appears that it reflects structural characteristics throughout the entire hierarchy of verbal communication.

A. Discussion of the Tree Diagram of the Condition Sentence

We have given in Figure 7 an analysis of the tree structure of a Conditional Sentence which has an elaborate sequence of dependent clauses embedded within it. The constituents, as represented here, are NUC(leus) only on Layer 1; the second layer begins with a conditional MAR(gin) and ends with an independent NUC(leus), with extensive embedding of marginal elements coming in between. The details can be seen by the reader by studying the chart. We will not attempt to give a complete analysis here.

B. Linear Representation of the Condition Sentence

As we have already indicated, the transformation from the notation of the tree structure of Figure 7 to linear representation follows the kind of conventions which we have discussed for the clause.

```
  NUC|Condition SN          MAR|DepCondSCl        -S |pro-2|Ø
1(+---+------------     2(±---+----------     3(+---+-----+----------
  H  |procedural               |condition         Act|anim |old couple

 O  |NP  |two         PR|v       MAR|ew|yangq    MAR|DepConTCl
+---+----+------      +--+-)3   ±---+--+-----   ±---+----------
 Und|item|radish      T  |       Em |em|em          |conaction

   MAR |tw  |gomaa-laa     -S |pro-2|Ø
3(±----+----+---------    +---+-----+----------
   Time|time|first-at      Act|anim |old couple

 -O |pro-3|Ø             MAR|DepSimTCl|tso-Nq
+---+-----+------       ±---+---------+--------
 Und|item |radish           |asactiv  |cook-ing

 MAR|DepSimTCl|zu-Nq         MAR|DepSimTCl|lam-niq
±---+---------+--------     ±---+---------+-------
    |asactiv  |peel-ing         |asactiv  |fry-ing

 MAR|DepSimTCl|thalaa maa-zu-waa kyaa-N
±---+---------+-----------------------
    |asactiv  |dust not spread do-ing

 PR|ptc|tsu-simãaq            MAR         |link       |'tamaa
+--+---+-------------)3     ±-----------+-----------+------
 T |con|plant-having         Co-ordinate|conjunction|then

 NUC|IndepDSCl           SITE|NP |'ti  'kha-laa
+---+---------        3(+----+---+------------
 H  |state               Ref |loc|that on-at
 -S |pro-2|Ø              O  |NP  |'phurtsok
+---+-----+----------    +---+----+-----------
Act |anim |old couple     Und|item|small stick

MAR |avⁿ |tsokq tsokq     PR|VP|dam       'jok go-ki-wi
+---+----+-----------    +--+--+----------------------)3)2)1
 M  |    |expression      DT|  |stick in put  must
```

Figure 8. Linear Representation of a Sentence.

IV. ANALYSIS OF A PARAGRAPH

Our tree diagram for paragraph level--see Figure 9--also follows the same kind of principles which have been indicated for the clause. No new major kinds of problems arise. The only difficulties thus far encountered are rather those which should be expected in the analysis of material which is only partially understood. The specific analysis of constructions of the paragraph level is highly tentative. So far as we can see at this stage, however, the notation is fully applicable to the paragraph representation in so far as our preliminary understanding of the paragraph is reflected in this material.

A. Discussion of the Tree Diagram for the Aperture Paragraph

In Figure 9 the paragraph selected for elicitive purposes has only the one tagmeme at the first layer, and this in turn is developed into a simultaneous representation in terms of a single sentence on Layer 2. Here, however, since we assume that the second layer could in fact have been expanded by numerous sentences, we treat it as a node representing that layer just as we handled comparable situations for the clause--see Section I.A.1.

```
               APERTURE | ¶ (introd)
            1(+---------+-----------)1
               Setting  |
                        |
                        |
                        |
                        |
        INTRODUCTION|Simple SN
      2(+-----------+---------)2
                    |
```

yul-i-laa 'mi 'rapche nangdzang-i wot-up-i-nok.
In a certain village there lived a childless married couple.

Figure 9. Tree Diagram of a Paragraph.

In Figure 9 two words in the vernacular below the Introduction node have the suffix -i 'a certain' as in yul-i-laa 'in a certain village' and in the word nangdzang-i of the noun phrase 'mi 'rapche nangdzang-i 'a certain childless married couple.' As mentioned earlier in Section I. A. 1. these suffixes make explicit that the phrase they are suffixed to is relevant on a higher level. In this instance the introd(ucer) is mentioned in the Aperture slot of this discourse, i.e. in the setting paragraph in which two of the three dramatis personae of this narrative are introduced. The third participant is introduced in the first sentence of the following paragraph.

B. Linear Representation of the Aperture Paragraph.

The change from the six-box constituent tree diagram to linear representation follows the same rules as those already given for clause and sentence.

```
   APERTURE | ¶ (introd)        INTRODUCTION|Simple SN|yul-
1(+--------+-----------   2(+------------+---------+--------
   Setting |                             |         |village-

i-laa        'mi    'rapche   nangdzang-i
-----------------------------------------------
a certain-at people childless married- a certain

wot-up-i-nok
------------------)2)1
live-Ims-cont-Pdj .
```

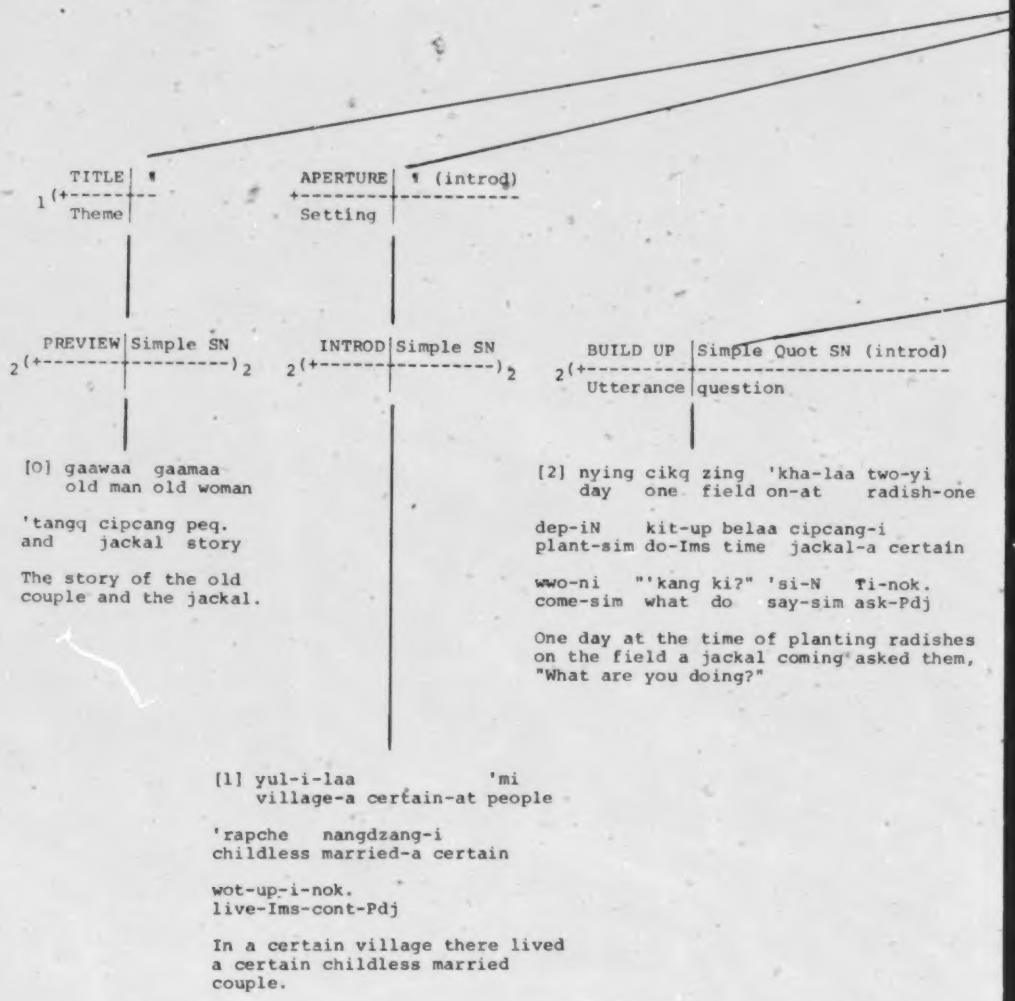
In a certain village lived a childless married couple.

Figure 10. Linear Representation of a Paragraph.

The relevance of the introd(ucer) morpheme from the lowest layer of structure in the system to the aperture tagmeme on a high layer of the system has been made explicit by the notation. The introd(ucer) notation warns the reader that there is some conditioned required element from a layer below. The notational representation requires the reader to trace down through the derivation until he comes to a lower layer where the introd(ucer) material is given. In this case he will not reach that point until he comes down to the level of morpheme--in a tree structure which is chosen to be represented that far down the tree--or to the word level or any other point at which the writer has chosen to stop his notational representation.

V. ANALYSIS OF A DISCOURSE

In looking at the next level--from discourse down to paragraph --we again have a tentative analysis, but show that once the


TITLE ¶
Theme
1
APERTURE ¶ (introd)
Setting
PREVIEW Simple SN
2
INTROD Simple SN
2
BUILD UP Simple Quot SN (introd)
Utterance question
2

[0] gaawaa gaamaa
old man old woman

'tangq cipcang peq.
and jackal story

The story of the old couple and the jackal.

[1] yul-i-laa 'mi
village-a certain-at people

'rapche nangdzang-i
childless married-a certain

wot-up-i-nok.
live-Ims-cont-Pdj

In a certain village there lived a certain childless married couple.

[2] nying cikq zing 'kha-laa two-yi
day one field on-at radish-one

dep-iN kit-up belaa cipcang-i
plant-sim do-Ims time jackal-a certain

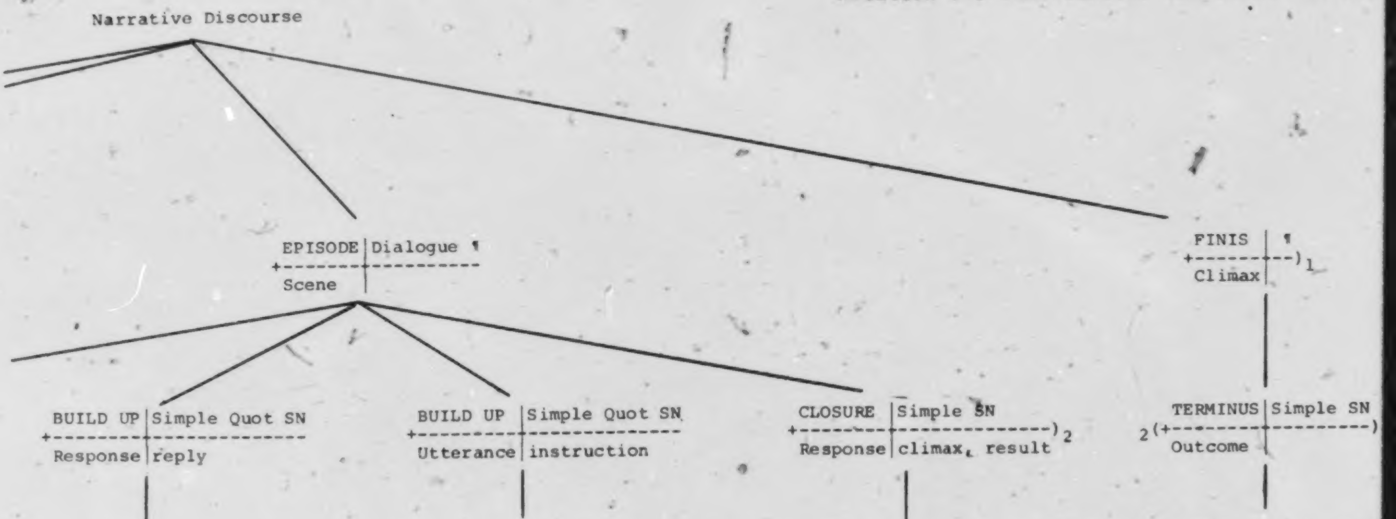
wwo-ni "'kang ki?" 'si-N Ti-nok.
come-sim what do say-sim ask-Pdj

One day at the time of planting radishes on the field a jackal coming asked them, "What are you doing?"

Figure 11. Tree Diagram of a Discourse.

345a

BEST COPY AVAILABLE


Narrative Discourse
EPISODE | Dialogue ¶
Scene
FINIS | ¶
Climax
)1
BUILD UP | Simple Quot SN
Response | reply
BUILD UP | Simple Quot SN
Utterance | instruction
CLOSURE | Simple SN
Response | climax, result
)2
TERMINUS | Simple SN
2(
Outcome

[3] 'tuwaa nangdzang nyi-w-iq
they married two-sf-Ag

"two dep-ki-wi"
radish plant-Aux-Fdj

sikyaa-nok.
say-Pdj

The couple said, "We are planting radishes."

[4] "hatteri, duk kyaa-N yangq two lye-ki
exclam. this do-sim ew radish produce-Aux

naq? [5] two dzu-si yangq gomaa-laa tso-Nq
Q radish plant-if ew first-at cook-sim

zu-Nq lam-niq thalaa maa-zu-waa kyaa-N
peel-sim fry-sim soil neg-cover-sf do-sim

tsu-simaaq 'tamaa 'ti 'kha-laa 'phurtsok
plant-con then that on-at small sticks

tsokq tsokq dam 'jok go-ki-wi" sikyaa-nok.
expression stick in put must-Aux-Fdj say-Pdj

"Oho, by doing it this way, will you produce fruit? If you want to plant radishes, first you cook them, peel them, fry them, not covering them with soil plant them, then on top you must stick in little sticks", he said.

[6] 'ti nangdzang nyi-w-iq
that married two-sf-Ag

"in-de" no-ni 'tuk rangq
be-may say-sim that only

kyaa-nok.
did-Pdj

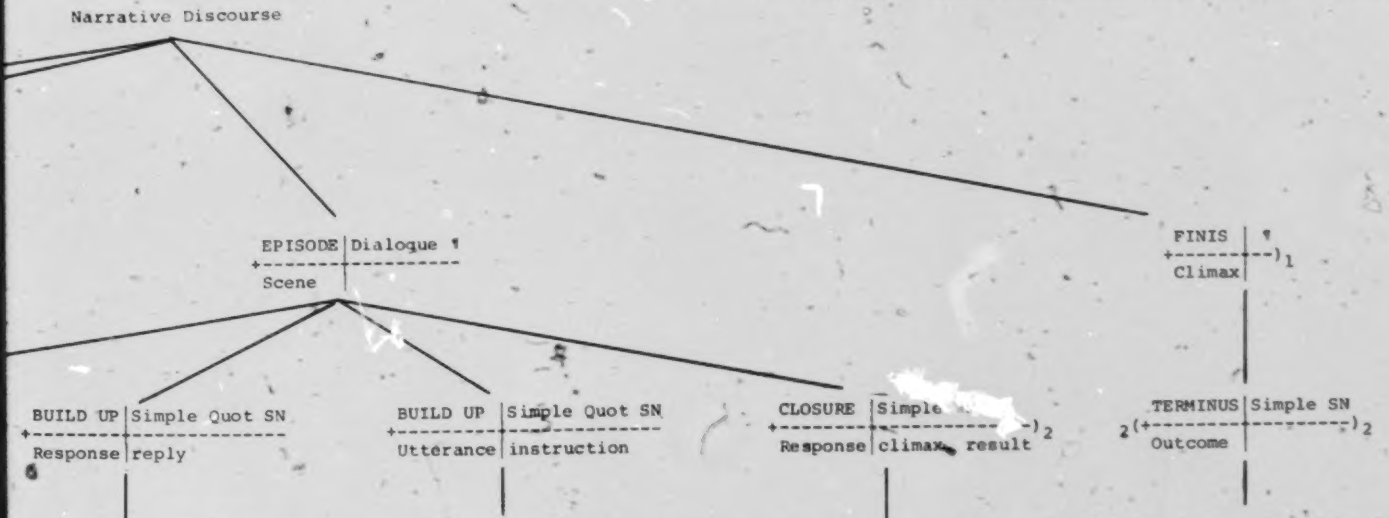
The couple (both of them) said, "May be" and followed the advice.

[7] 'juk-laa "two ke wung
later-at radish grow come

'si-N yangq cipcang-lak tok
say-sim ew jackal-Ag all

jaang-nok.
put-Pdj

(Some time) later they said,
and see now the radishes come
only then they found out that
instead had already eaten the


Narrative Discourse
EPISODE | Dialogue ¶
Scene
FINIS | ¶
Climax
)1
BUILD UP | Simple Quot SN
Response | reply
BUILD UP | Simple Quot SN
Utterance | instruction
CLOSURE | Simple
Response | climax, result
)2
TERMINUS | Simple SN
2(Outcome
)2

[3] 'tuwaa nangdzang nyi-w-iq
they married two-sf-Ag

"two dep-ki-wi"
radish plant-Aux-Fdj

sikyaa-nok.
say-Pdj

The couple said, "We are planting radishes."

[4] "hatteri, duk kyaa-N yangq two lye-ki
exclam. this do-sim ew radish produce-Aux

naq? [5] two dzu-si yangq gomaa-laa tso-Nq
Q radish plant-if ew first-at cook-sim

zu-Nq lam-niq thalaa maa-zu-waa kyaa-N
peel-sim fry-sim soil neg-cover-sf do-sim

tsu-simaaq 'tamaa 'ti 'kha~~-laa-~~'phurtsok
plant-con then that on-at small sticks

'tsokq tsokq dam 'jok go-ki-wi" sikyaa-nok.
expression stick in put must-Aux-Pdj say-Pdj

"Oho, by doing it this way, will you produce fruit? If you want to plant radishes, first you cook them, peel them, fry them, not covering them with soil plant them, then on top you must stick in little sticks", he said.

[6] 'ti nangdzang nyi-w-iq
that married two-sf-Ag

"in-de" no-ni 'tuk rangq
be-may say-sim that only

kyaa-nok.
did-Pdj

The couple (both of them) said, "May be" and followed the advice.

[7] 'juk-laa "two ke wung lhaq Do"
later-at radish grow come see go

'si-N yangq cipcang-lak tokq so-N
say-sim ew jackal-Ag all eat-sim

jaang-nok.
put-Pdj

(Some time) later they said, "(Let's) go and see how the radishes come along"; and only then they found out that the jackal instead had already eaten them all.

```
   TITLE| *     PREVIEW|Simple SN          [0] gaawaa  gaamaa    'tangq
1(+-----+--  2(+-------+---------              old man old woman and
   Theme|              |
                                           cipcang peq.
                                           jackal  story

                                           The story of the old couple
                                           and the jackal.)2

 APERTURE| * (introd)     INTRODUCTION|Simple SN   [1] yul-i-laa
+--------+----------  2(+-------------+---------       village-a certain-at
 Setting |                            |
                                           'mi    'rapche
                                           people childless

                                           nangdzang-i
                                           married-a certain

                                           wot-up-i-nok.
                                           exist-Ims-cont-Pdj

                                           In a certain village there
                                           lived a childless married
                                           couple.)2

 EPISODE|Dialogue *    BU|Simple Quot SN(introd)   [2] nying cikq zing  'kha-laa
+-------+---------  2(+--+--------------------          day   one  field on-at
 Scene  |              U |question
                                           two-yi      dep-iN    kit-up
                                           radish-some plant-sim do-Ims

                                           belaa cipcang-i
                                           time  jackal-a certain

                                           wwo-ni   'kang ki?  'si-N
                                           come-sim what  do   say-sim
```

```
Ti-nok.
ask-Pdj
```

One day at the time of planting radishes on the field a jackal came, saying, "What are you doing?"

```
BU       |Simple Quot SN
+--------+--------------
Response |reply
```

```
[3] 'tuwaa nangdzang nyi-w-iq  "two
     they   married   two-sf-Ag  radish

dep-ki-wi"    sikyaa-nok.
plant-Aux-Fdj say-Pdj
```

The couple said, "We are planting radishes."

```
BU|Simple Quot SN
+-+--------------
U |Instruction
```

```
[4] "hatteri, duk  kyaa-N yangq two
     exclam.  this do-sim ew    radish

lye-ki      naq?"
produce-Aux Q
```

"Oho, by doing it this way will you produce fruit?"

```
[5] two    dzu-si   yangq gomaa-laa tso-Nq
    radish plant-if ew    first-at  cook-sim

zu-Nq    lam-niq thalaa maa-zu-waa   kyaa-N
peel-sim fry-sim soil   neg-cover-sf do-sim

tsu-simaaq 'tamaa 'ti  'kha-laa 'phurtsok
plant-con  then   that on-at    stick

tsokq tsokq      dam      'jok go-ki-wi"
redup expression stick in put must-Aux-Fdj
```

```
                                         sikyaa-nok.
                                         say-Pdj

                                         If you want to plant radishes, first you cook
                                         them, peel them, fry them, not covering them
                                         with soil, plant them, then on top you must
                                         stick in little sticks", (he) said.

 CLOSURE |Simple SN                      [6] 'ti  nangdzang nyi-w-iq  "in-de' no-ni
+--------+--------------                      that married   two-sf-Ag  be-may say-sim
 Response|climax, result
                                         'tuk rangq kyaa-nok.
                                         that only  did-Pdj

                                         That married (couple), both of them, said,
                                         "May be", and followed the advice.)2

 FINIS  | ¶       TERMINUS|Simple SN     [7] 'juk-laa "two    ke   wung lhaq Do"
+-------+--     2(+--------+---------         later-at radish grow come see  go
 Climax|           Outcome |
                                         'si-N   yangq cipcang-lak tokq so-N
                                         say-sim ew    jackal-Ag   all  eat-sim

                                         jaang-nok.
                                         put-Pdj

                                         Some time later they said, "Let's go and see
                                         how the radishes come along"; and only then
                                         they found out that the jackal instead had
                                         eaten them all.)2)1
```

Figure 12. Linear Representation of a Discourse.

analysis is given that the notation is ready to handle it. No new principles are suggested here from those indicated above.

A. Discussion of the Tree Diagram of the Discourse

At Layer 1 of Figure 11 the particular discourse is cut into Title, Aperture, Episode, and Finish; and on Layer 2 there are single nodes and multiple nodes breaking it down in accordance with principles already discussed.

B. Linear Representation of a Narrative Discourse

Similarly, the transition from the tree representation to the linear representation includes no new principles.

In terms of layout, however, we have made one change; the fillers of Boxes 3 and 6 are given to the right of the tagmemes because of problems of spacing.

VI. LINEAR REPRESENTATION OF THE COMPLETE TEXT

Now with samples given for phrase, clause, sentence, paragraph, and discourse, in abbreviated fashion, we are now ready to put them all together in connected text. As before, no new principles are needed. The only requirement is that we choose the layering at which we wish to start--in this case, at the discourse as a whole.

We first give in Figure 13 the story in simple running form with interlinear translation, followed by free translation.

The Story of the Old Couple and the Jackal[5]

[0] gaawaa gaamaa 'tangq cipcang peq.
old man old woman and jackal story

[1] yul-i-laa 'mi 'rapche nangdzang-i
village-a certain-at people childless married-a certain

wot-up-i-nok.
live-Ims-cont-Pdj

[2] nying cikq zing 'kha-laa two-yi dep-iN kit-up
day one field on-at radish-some plant-sim do-Ims

belaa cipcang-i wwo-ni "'kang ki?" 'si-N Ti-nok. [3] 'tuwaa
jackal-a certain come-sim what do say-sim ask-Pdj they

nangdzang nyi-w-iq "two dep-ki-wi" sikyaa-nok. [4] "hatt
married two-sf-Aq radish plant-Aux-Fdj say-Pdj

[4]	"hatteri,	duk	kyaa-N	yangq	two	lye-ki	naq?	[5]
	exclam.	this	do-sim	ew	radish	produce-Aux	Q	

two	dzu-si	yangq	qomaa-laa	tso-Nq	zu-Nq	lam-niq	thalaa
radish	plant-if	ew	first-at	cook-sim	peel-sim	fry-sim	soil

maa-zu-waa	kyaa-N	tsu-simaaq	'tamaa	'ti	'kha-laa	'phurtsok
neg-cover-sf	do-sim	plant-con	then	that	on-at	small sticks

tsokq tsokq	dam	'jok	qo-ki-wi"		sikyaa-nok.
redup expression	stick in	put	must-Aux-Fdj	say-Pdj	say-Pdj

[6]	'ti	nangdzanq	nyi-wi-iq	"in-de"	no-ni	'tuk	rangq	kyaa-nok.
	that	married	two-sf-Aq	be-may	say-sim	that	only	did-Pdj

[7]	'juk-laa	"two	ke	wung	lhaq	Do"	'si-N	yangq
	later-at	radish	grow	come	see	qo	sav-sim	ew

cipcanq-lak	tokq	so-N	jaang-nok.
jackal-Aq	all	eat-sim	put-Pdj

Fre Free Translation.

[0] The story of the old couple and the jackal..

[1] In a certain village there lived a childless married couple.

[2] One day at the time of planting radishes in the field a jackal coming, asked (them) saying, "What are (you) doing?" [3] The couple said, "(We are) planting radishes." [4] "Oho, by doing it this way, will you produce fruit? [5] If you want to plant radishes, first you cook them, peel them, fry them, not covering them with soil, plant them, then on top you must stick in little sticks," (he) said. [6] The couple (both of them) said, "May be," and followed the advice.

[7] (Some time) later they said, "(Let's) go and see how the radishes come along"; and only then they found out that the jackal instead had already eaten them all.

Figure 13. A Text (Sherpa Narrative Discourse).

Now we give the complete linear representation of the text following the samples above.

[0]	1(+	TITLE	¶	2(+	PREVIEW	Simple SN	3(+	NUC	ACl
		Theme						H	state

4(+	AD	NP	5(+	NUC	n	gaawaa gaamaa
	Compl	item		H_1	item	old man old woman

```
 MAR    |link|'tangq    NUC|n   |cipcang       S  |NP  |peq
+-------+----+------   +---+----+-------)5   +---+----+-----
¯Co-ord |conj|and       H2 |item|jackal       Und|item|story

 -PR|v     |Ø
+---+------+--)4)3)2
 A  |state |is

        APERTURE| ¶ (introd)      INTRODUCTION|Simple SN
  [1]  +--------+----------    2(+------------+---------
        Setting |                             |

   NUC|SSCl       SITE|NP |yul-i-laa                S  |NP
3(+---+-----   .4(+----+---+--------------------   +---+----
    H |state       Ref|loc|village-a certain-at     Act|anim

   NUC|n   |'mi       MAR |adj |'rapche
5(+---+----+------   +----+----+---------
    H |item|people   ¯Desc|qual|childless

 MAR |adj |nangdzang-i                  PR|v|wot-up-i-nok
+----+----+------------------)5       +--+-+-----------------)4)3)2
¯Desc|qual|married-a certain           SS| |live-Ims-cont-Pdj

        EPISODE|Dialogue ¶       BUILD UP |SimpleQuotSN (introd)
  [2]  +-------+----------    2(+---------+---------------------
        Scene  |                 Utterance|question

    MAR |NP          NUC|n   |nying    MAR|num|cikq
3(+----+----    4(+---+----+-----   +---+---+----)4
  ¯Time|time        H |item|day     ¯Qf |   |one

 MAR|NP          NUC|n   |zing     MAR|ppsn|'kha-laa       MAR |NPt
+---+---     4(+---+----+-----   +---+----+--------)4    +----+----
¯Loc|loc        H  |item|field   ¯Det|loc |on-at         ¯Time|time

    MAR |DepRelTCl         -S |NP  |Ø                  O  |DepSimTCl
4(+----+---------     5(+---+----+-----------      +---+---------
  ¯Desc|                  Act|anim|old couple        Und|

    O  |NP  |two-yi            PR|ptc/ss|dep-iN
6(+---+----+-----------     +--+------+---------)6
   Und|item|radish-some      T |sim   |plant-ing
 PR|v|kit-up         NUC|tw|belaa         NUC|DTQuotCl
+--+-+-------)5     +---+--+-----)4      +---+--------
 T | |do-Ims         H  |  |time          H  |perform

    S  |NP   |cipcang-i                  AD|DepSimSTCl
4(+----+-----+----------------          +--+----------
   Act |anim |jackal-a certain          -  |asactiv

    -SITE|lw    |Ø          PR|ptc/ss|wwo-ni
5(+------+------+-----     +--+------+-------)5
    Ref  |inanim|there      ST|sim   |com-ing

 -IO|pro-3pl|Ø              O  |IndepTCl        -S |pro-2|Ø
+---+-------+----------    +---+--------    5(+---+-----+----------
 Ref|anim   |old couple     Und|dirquot         Act|anim |old couple

 O  |interpro|'kang     PR|v|ki         PR|VPperform
+---+--------+-----    +--+-+--)5      +--+---------
 Und|        |what      T | |do         DT|reporting

    MAR|ptc/ss|'si-N         NUC|v|Ti-nok
5(+----+------+-------      +---+-+-------)5)4)3
   -DT |sim   |say-ing       DT | |ask-Pdj

[3]  BUILD UP|SimpleQuotSN         NUC|IndepDTQuotCl          S  |NP
    +--------+-------------     3(+---+-------------      4(+----+----
     Response|reply                H  |                        Act|anim

    MAR|pro|'tuwaa       -NUC|n   |Ø                  MAR |adj |nangdzang
5(+----+---+------      +----+----+----------        +----+----+---------
   -Lim|   |those         H  |item|old couple        -Desc|qual|married

 MAR|num|nyi-w-iq           -IO|pro-3|Ø            O  |IndepTCl
+---+---+---------)5       +---+-----+------      +---+--------
-Qf |   |two-sf-Ag          Ref|anim |jackal       Und|dirquot

    -S |pro-1pl|Ø               O  |NP  |two
5(+----+-------+----------     +---+----+------
    Act|anim   |old couple      Und|item|radish
 PR|VP|dep-ki-wi              PR|VPperform|sikyaa-nok
+--+--+-------------)5    +--+---------+----------)4)3
 T |  |plant-Aux-Fdj         DT|reporting|say-Pdj

      BUILD UP |Simple SN          NUC|IndepDTQuotCl
[4]  +---------+----------    3(+---+------------
      Utterance|Instruction         H  |perform

    -S |pro-3|Ø         -IO|pro-3pl|Ø              O  |Monoloque
 4(+---+-----+------   +---+-------+----------   +---+---------
   Act |anim |jackal    Ref|anim   |old couple   Und|dirquot

   MAR  |SimpleQuotSN          MAR |exw |hatteri     NUC|IndepTCl
 5(±----+-----------      6(±----+----+--------   +---+--------
   RhetQ|                    Excl|excl|surprise     H  |

    AD|DepSimTCl        O  |pro|duk             PR|ptc/ss|kyaa-N
 7(±--+---------    8(+---+---+---------     +--+------+------)8
      |asactiv        Und|   |like this       T |sim   |do-ing

 AD|ew|yangq         -S |pro-2pl|Ø             O  |NP  |two
±--+--+--------     +---+-------+---------    +---+----+------
 Em|em|emphasis      Act|anim   |old couple   Und|item|radish

 PR|v|lye-ki                MAR|qw|naq                    NUC|ConditionSN
+--+-+-----------)7      ±---+--+---------)6    [5]  +---+-----------
 T | |produce-Aux           Mod|  |question               H  |procedural

   MAR|DepCondTCl        -S |pro-2pl|Ø              O  |NP  |two
6(±---+----------    7(+---+-------+----------   +---+----+------
      |condition        Act|anim   |old couple    Und|item|radish

 PR|v|dzu-si             MAR|ew|yangq          MAR|DepConTCl
+--+-+--------)7      ±---+--+--------      ±---+---------
 T | |plant-if           Em |em|emphasis           |conaction

    AD  |tw  |gomaa-laa     -S |pro-2pl|Ø
 7(±----+----+---------    +---+-------+----------
    Time|time|first-at      Act|anim   |old couple
 -O |pro-3|Ø          AD|DepSimTCl      -O |pro-3|Ø
+---+-----+------    ±--+---------   8(+---+-----+------
 Und|item |radish       |asactiv         Und|item |radish

 PR|ptc/ss|tso-Nq          AD|DepSimTCl      -O |pro-3|Ø
+--+------+--------)8    +--+---------   8(+---+-----+------
 T |sim   |cook-ing          |asactiv         Und|item |radish

 PR|ptc/ss|zu-Nq           AD|DepSimTCl      -O |pro-3|Ø
+--+------+--------)8    ±--+---------   8(+---+-----+------
 T |sim   |peel-ing          |asactiv         Und|item |radish

 PR|ptc/ss|lam-niq        AD|DepSimTCl     O  |DepTCl
+--+------+-------)8    +--+---------  8(+---+------
 T |sim   |fry-ing          |asactiv        Und|

    O  |NP  |thalaa   PR|v|maa-zu-waa         PR|ptc/ss|kyaa-N
9(+---+----+------   +--+-+-------------)9  +--+------+------)8
   Und|item|soil      T | |neg-cover-sf      T |sim   |do-ing

 PR|ptc|tsu-simaaq           MAR   |link           |'tamaa
+--+---+------------)7    ±------+---------------+------
 T |con|plant-having        Co-ord|conjunction    |then

 NUC|IndepDSCl         SITE|NP          MAR|pro|'ti
+---+---------    7(+----+------   8(±---+---+----
 H  |                  Ref |inanim       Lim|   |that

 -NUC|n   |Ø         MAR|ppsn|'kha-laa         -S |pro-2pl|Ø
+----+----+-----   ±---+----+--------)8    +---+-------+----------
 H   |item|field     Det|    |on-at           Act|anim   |old couple

 O  |NP  |'phurtsok           AD|avⁿ|tsokq tsokq          PR|VP
+---+----+------------      ±--+---+----------------    +--+--
 Und|item|small sticks        M |   |redup expression      DT|

   MAR|v|dam          NUC|v|jok    MAR|v    |go-ki-wi
8(±---+-+--------    +---+-+---   ±---+-----+------------)8)7)6)5
   T  | |stick in     DT | |put        |modal|must-Aux-Fdj
 PR|VPperform|sikyaa-nok                        CLOSURE |SimpleSN
+--+---------+----------)4)3   [6]  +--------+---------------
 DT|reporting|say-Pdj                 Response|climax, result

   NUC|IndepTCl         S |NP(-i)          MAR|pro|'ti
3(+---+--------     4(+---+------      5(+---+---+----
   H  |                Act|anim           -Lim|lim|that

 -NUC|n   |Ø            MAR |adj |nangdzang        MAR|num|nyi-w-iq
+----+----+------     +----+----+---------     +---+---+---------)5
 H   |item|people      -Desc|qual|married       -Qf |   |two-sf-Ag

 AD|DepSimDTCl           -IO|pro-3|Ø           O  |IndepCl
+--+----------       5(+---+-----+------     +---+--------
-  |asactiv             Ref|anim |jackal       Und|reported

   -S |pro-3|Ø          PR|v|in-de             PR|ptc/ss   |no-ni
6(+---+-----+----     +--+-+------)6       +--+---------+-------)5
   Und|item |that       A | |be-may            DT|perform  |say-ing

 O  |NP              NUC|pro|'tukq        MAR|ew|rangq
+---+----       5(+---+---+-----      +---+--+-----)5
 Und|item           H  |   |that       -Em |em|only

 PR|v|kyaa-nok
+--+-+--------)4)3)2
 T | |do-Pdj

         FINIS  |¶          TERMINUS|SimpleSN(time)
   [7]  +--------+--     2(+--------+--------------
         Climax |           Outcome |

   MAR |NP           NUC|n   |Ø            MAR|ppsn|'juk-laa
3(+----+----     4(+---+----+-----     +---+----+--------)4
  -Time|time         H  |item|event     -Det|    |after-at

 NUC|IndepTCl            AD|DepSimDTCl         -IO|pro-3|Ø
+---+--------      4(+---+----------     5(+---+-----+------
 H  |                -   |asactiv            Ref|anim |jackal
 O  |Monologue      -S |pro-1pl|Ø             -SITE|lw    |Ø
+---+---------   6(+---+-------+----------   +-----+------+-----
 Und|dirquot        Act|anim   |old couple    Ref  |inanim|there

 AD  |IndepTCl      -S |pro-1pl|Ø             O   |DepRCl
+----+--------   7(+---+-------+----------   +---+-------
 Purp|              Ref|anim   |old couple    Und|process

   S  |NP  |two      AD  |DepRCl     -S  |pro-3 |Ø
8(+---+----+------  +----+------  9(+---+------+------
   Und|term|radish   Purp|           Und|inanim|radish

 PR|v       |keq          PR|v       |wung       PR|v|'lhaq
+--+--------+------)9    +--+--------+----)8    +--+-+-----)7
 R |process |sprout       ST|motion  |come       T | |see

 PR|v      |Do          PR|ptc/ss        |'si-N          AD|ew|yangq
+--+-------+--)6      +--+--------------+-------)5     +--+--+--------
 ST|motion |go         DT|sim, perform  |say-ing        Em|em|emphasis

 S  |NP  |cipcang-lak              O  |DepSimTCl
+---+----+------------------      +---+---------
 Act|anim|jackal-instead(Ag)       Und|asactiv

   O  |pro |tokq          PR|ptc/ss|so-N
5(+---+----+---------    +--+------+-------)5
   Und|item|that all      T |sim.  |eat-ing

 PR|v|jaak-nok
+--+-+---------------)4)3)2)1
 T | |(put)finish-Pdj
```

Figure 14. Linear Representation of the complete Text.

REFERENCES

Pike, Kenneth L. 1964. Discourse analysis and tagmeme matrices. Papers on Philippine Linguistics, Oceania Linguistic Monograph 3:5-25. (Contains precursors to Pike's work with four-box material.)

Becker, Alton Lewis. 1967. A generative description of the English subject tagmeme. Unpublished Ph. D. dissertation, University of Michigan. (Develops four-box approach.)

Wise, Mary Ruth. 1971. Identification of participants in discourse: a study of aspects of form and meaning in Nomatsiguenga. S.I.L. Publications in Linguistics and Related Fields Nr. 28.

Klammer, Thomas Paul. 1971. THe structure of dialogue paragraphs in written English dramatic and narrative discourse. Unpublished Ph. D. dissertation, University of Michigan.

Note: In both Wise and Becker there is some further handling of the phonological row which leads to a nine-box rather than six-box system. We have not attempted to add the phonological materials to the linear notation at this point. It should be clear, however, that once the general style is developed, the phonological row of the nine-box representation can be added also. A difficulty remains, however, which we have not attempted to solve here. Wise in some of her structural material would deal with discontinuities between the semantic constituents and the grammatical constituents. We do not attempt to deny that there are such difficulties--but have the following comment. We do not show them in our current notation. A more complicated type of notation would be needed to deal with extensive differences between borderpoints of semantic, grammatical, and phonological units. On the other hand, this notation implies that at some level--but not at all levels--of theory there must be some semantic relationship between all grammatical constituents of a unit. It is this particular relationship which the current notation attempts to capture. It neither denies nor represents semantic relationships which are criss crossing with the grammatical ones. It only affirms that a certain relationship exists, without claiming to exhaust all relationships which are not shown by this device.

FOOTNOTES

[1] This work was done pursuant to an agreement of co-operation between the Summer Institute of Linguistics and Tribhuvan University and has been carried out under the auspices of the

Institute of Nepal Studies of the University. The authors wish to express their gratitude to the Institute of Nepal Studies for their part in making this research possible.

This paper was in part supported by a grant from the U. S. Office of Education, Washington, D. C., under contract number OEC-0-097721-2778 (014).

Research toward the labeling of the sememic function shown in Box 4 of the clause tagmemes has profited greatly from theoretical work by Dr. Austin Hale. For details of this analysis see the clause paper in part 2 of this volume.

[2] In part 2 of this volume certain Sherpa clause types, using similar data, are given in outline form.'

[3] For these terms and their relevance to Sherpa, see the clause paper in part 2 of this volume.

[4] A subscript identifies a layer number. That layer number is not to be equated with the tagmemic level such as phrase or clause, but represents the particular depth of embedding which happens to occur in a particular place in a particular text. A particular layer number has no theoretical significance beyond the depth of embedding in the particular example chosen.

[5] We are grateful to Mr. Ang Nyima Lama for supplying much of the language material on which the present study is based.

APPENDIX

A. Abbreviations

A	attributive
Act	actor
activ	activity
AD	adjunct
adj	adjective
Ag	agent
anim	animate
as	associated
Aux	auxiliary
av	adverb
Cl	clause
Compl	complement
con	consecutive (action)
Cond	conditional
conj	conjunction
cont	continuous
Co-or	co-ordination
Dep	dependent

Desc	description
Det	determiner
dirquot	direct quotation
Em, em	emphasis
ew	emphasis word
excl	exclamation
exw	exclamation word
Fdj	future disjunctive
G/	grammatical row
H	head
Ims	impersonal
inanim	inanimate
Indep	independent
inter	interrogative
Introd, introd	introducer
IO	indirect object
Lim	limiter
Loc, loc	location
lw	location word
M	manner
MAR	margin
Mod	modal
n	noun
neg	negative
NP	noun phrase
NUC	nucleus
num	numeral
O	object
Pdj	past disjunctive
perform	performative
pl	plural
ppsn	postposition
PR	predicate
pro	pronoun
ptc	participle
Purp	purpose
Q	interrogative marker
Qf	quantifier
qual	quality
Quot, quot	quotative
qw	question word
R	receptive
Ref	referent
Rel	relative
RhetQ	rhetorical question
S	subject
S/	sememic row
sf	stem formative
Sim, sim	simultaneous action
SN	sentence
SS, ss	semistative
st	stem
ST	semitransitive

suff	suffix
t	time
T	transitive
tw	time word
U	utterance
Und	undergoer
v	verb
VP	verb phrase
x^n	repeatable
	paragraph
Ø	zero
-1	1st person
-2	2nd person
-3	3rd person
[1]	sentence number

(Editor's note: Since this paper was completed much earlier than most of the other papers in this volume, there are some terminological differences that should be mentioned. The terms, DiTransitive, DiReceptive and the like in this paper correspond to the terms BiTransitive, BiReceptive and the like in other papers. The term Site in this paper corresponds to Referent in certain other papers as a grammatical function and Referent in this paper corresponds to Site as a sememic function.)

Paired-Sentence Reversals

In the Discovery of Underlying and Surface Structures In Sherpa Discourse

Kenneth L. Pike and Burkhard Schöttelndreyer

CONTENTS

I. PRELIMINARY REVERSAL TECHNIQUES IN RELATION TO SURFACE PARAGRAPHS 362

II. CHRONOLOGICAL VERSUS LOGICAL OR FOCUS RELATIONS. . . . 365

III. PRIMARY VERSUS SECONDARY REVERSAL IN RELATION TO UNDERLYING PARAGRAPHS. 367

IV. DEGREE OF INVOLVEMENT. 367

V. OTHER VARIANTS IN DISCOURSE STRUCTURE. 371

REFERENCES. 373

FOOTNOTES 373

A recent paper by Pike and Pike (1971) attempted the development of several heuristic devices for the detection of structure at the discourse level. A single story (in English) was taken as the base for the investigation. Then the story was retold with a different order of the sentences, different narrators, different emotional attitudes, paraphrase and near-paraphrase replacement of selected sentences, reversal of the order of the paragraphs of the story, and total replacement of the sememic content of the story--a different story told to the same grammatical structure as identified by a tree diagram maintaining the same constituent relationships. Of these possibilities we emphasize here the paired-sentence reversal.

I. PRELIMINARY REVERSAL TECHNIQUES IN RELATION TO SURFACE PARAGRAPHS

First we[1] give the story of "The Jackal and the Crow" in a standard narrator-taped version[2]--the version in which it was volunteered to us by Mr. Jangbu Sherpa. This we call Version A. Both literal and free translation are provided; sentences are numbered serially.

The Jackal and the Crow, Version A

0. di peq cipcanq 'tangq kalak 'ti 'in. 1. nyinq
this story jackal and crow that is day

cikq tshermu kalak cik-iq tshonggangq sur 'kurq cikq khwo-nok.
one daytime crow one-Ag shopkeeper from bread one bring-Pdj

2. 'ti kalak 'ti 'kurq khur-niq pipal-ki dongb-i 'kha-laa
that crow that bread carry-sim tree-G tree-cm on-at

'de-nok.
sit-Pdj

3. 'ti belaa 'ti kalak 'ti-ki 'kurq khwo-wuq 'ti
that time that crow that-G bread bring-Ims that

cipcang cik-iq thong-nok. 4. 'ti cipcang 'ti-ki kalak 'kurq
jackal one-Aq see-Pdj that jackal that-Ag crow bread

'ti 'tsukyaaq Tho-Nq saap 'si-ni naasam taang-nok.
that how take away-sim eat say-sim thinking do-Pdj

5. 'ti cipcang 'ti-ki saa-nok "oho 'ti dongb-i 'kha-laa
that jackal that-Ag say-Pdj oho that tree-cm on-at

'de-tup kalak 'ti 'kangiq lyemu 'nok" saa-nok. 6. "'tarung
sit-Ims crow that how nice be say-Pdj again

'ti-ki tamnyeq 'ti tso lyemu wo-te" saa-nok.
that-G talk that how nice be-may say-Pdj

7. 'tamaa kalak 'ti-ki nosur kyaa-ni "kakq" saa-nok.
then crow that-Aq proud do-sim kak say-Pdj

8. 'ti dongb-i 'kha-laa wo-tup 'kurq 'ti sa-laaq lum-nok.
that tree-cm on-at be-Ims bread that ground-to fall-Pdj

Free Translation

0. This is the story about the jackal and the crow. 1. One day a crow brought some bread from a shopkeeper. 2. Carrying the bread, the crow sat on a pipal tree.

3. At that time, when the crow brought the bread, a jackal saw it. 4. In order to eat the bread the jackal wanted to do a trick and snatch away the bread from the crow. 5. The jackal said, "Oho, what a beautiful crow is sitting on that tree. 6. If only one could listen to its voice; how nice that would be."

7. Then the crow, becoming proud, said "Kak." 8. The bread (that was in the mouth of the crow) fell to the ground.

Next (Version B) a different Sherpa--Mr. Ang Nyima Lama--was asked to take the transcribed story, which had the sentences numbered, and to rewrite the story with the sentences in the order 2-1-4-3-6-5-8-7. He merged some sentence pairs into single sentences: 2-1, 4-3, 5-8, and 7-8 (with 8 re-occurring and sentence 6 coming independently between 4-3 and 5-8). The second presentation of sentence 8 allowed the story to be given a typical closure--i.e. to have a discourse characteristic which helps to show that a discourse is more than a set of sentences or more than a set of sentences connected by "and."[3] The merging of 2-1 allows the retention of the main verb of the original first sentence as still the main verb of the merged first sentence, so that the announcement of the opening theme--the bread brought by the crow--is maintained. At the same time, the original sentence 2 is absorbed as a dependent clause in a manner acceptable for handling dependent reference to setting. We give only the 2-1 and 5-8-7-8 sentences of this version:

The Jackal and the Crow, Version B

2-1 pipal dongb-i 'kha-laa 'det-up kalak 'ti-ki nying cikq
tree tree-cm on-at sit-Ims crow that-Ag day one

tshermu tshongganqq nasur 'kur-iq khurq wwo-nok. ... 5-8.
daytime shopkeeper from bread-one carry come-Pdj

"'ti dongb-i 'kha-laa 'det-up kalak 'ti kangqyapq lyemu-
that tree-cm on-at sit-Ims crow that surprisingly beautiful-

yi 'nok" 'si-N 'ti cipcang 'ti-ki sikyaa-nok, 'ti kalak
em be say-sim that jackal that-Aq say-Pdj that crow

'kha-laa wot-up 'kurq 'ti sa-laaq lum ji-tup-laa. 7-8.
on-at be-Ims bread that ground-to drop give-Ims-Pur

'tamaa kalak 'ti-ki nosur kyaa-ni "kakq" 'sir-u belaa 'kurq
then crow that-Aq pride do-sim kak say-Ims time bread

sa-laaq lum-nok.
ground-to drop-Pdj

Free Translation

2-1. The crow sitting on a pipal tree one day brought some bread from a shopkeeper. 5-8. "The crow sitting on the tree is surprisingly beautiful," the jackal said to make the bread of the crow fall down to the ground. 7-8. Then the crow, becoming proud, said "Kak," and at that moment the bread fell down to the ground.

On the basis of Version B, we raised certain questions. We wanted to know whether Mr. Lama had made as many changes as necessary for good resultant style or whether some awkwardnesses had remained, brought in by the reversal but not eliminated by the reworking. We asked him, therefore, to start from the original again but to work carefully on the basis of his understanding, now, of the fact that we wanted the same story in different sequence but in good free style. As a result, we got smoother style in Version C, but with so many changes from the original version that it was difficult to judge which of them were in fact required as a result of order reversal and which were merely alternate styles or emphases.

Of value to us in Version C is the further reworking of 2-1 so as to re-establish a temporal element in the opening and the introduction of the participant as indefininte (rather than definite--a residue in Version B of the initial structure of the original sentence 2). We give only this first pair:

The Jackal and the Crow, Version C

1-2. nying cikq tshermu kalak-i-ki tshonggangq nasur
day one daytime crow-one-Ag shopkeeper from

khurq wwo-wup 'kurq 'ti khur-niq saap-laa pipal dongq-i go-laa
bread come-Ims bread that carry-sim eat-pur tree tree-cm on-at

'paap-nok.
perch-Pdj

Free Translation

1-2. One day a crow bringing bread from a shopkeeper to eat, perched on top of a pipal tree.

In the process, however, Mr. Lama did not reverse the order. What he did do was to give a paraphrase in which the main verb of original sentence 1 was made into a dependent verb, merging sentences 1-2 but not reversing them. But what we had originally wished to test however, was whether or not reversals were possible--this cannot be taken for granted[4]--and, if so, what reworkings were necessary for smooth style. This version, therefore, was not entirely relevant to our purposes.

II. CHRONOLOGICAL VERSUS LOGICAL OR FOCUS RELATIONS

Since we now knew that reversals were possible in Sherpa, we wanted to get the best possible experimental conditions to investigate their structural implications. In particular, we wanted from Mr. Lama the minimum changes which could accompany maximum acceptability of style. So we requested Version D. This time he was given a typed page with the original sentences of Version A with its pairs in reversed order, but with no other changes, and with the instructions: "Make any changes which are necessary either to make the story read smoothly or to keep the meaning the same as the first: but do not make any more changes than you need to." Result: the introduction of the first participant is with the indefinite marker -i- in kalak-i-ki 'a crow,' and the second mention in 2-1 has the noun replaced by pronoun. In addition, and more interesting, is the addition of logical-relation markers: in 2-1 and 4-3 'cilaa 'si 'si literally 'why say say,' meaning, freely, 'because'; and (with same free translation) in 8-7 'what doing say say'; in 6-5, with emphasis (or focus) on the voice as nice, whereas in 5-6 the niceness of the crow is mentioned before the niceness of the voice.

This latter bit demonstrates a major point in the value of reversal-potential to the system: reversal of sentences allows the narrator to change focus sharply but requires--or allows--markers to specify the desired focus additon (supplementing the impact of the physical ordering) while retaining the original meaning.

In 8-7 a link 'tamaa 'then' is taken from old 7 and put on new 8. That is, the relation of "before and after" applies to the composite 7-8 or 8-7 and not merely to the original 7. Therefore the particle precedes the whole. This is evidence of the composite semantic-formal unity of the sentence pair, since the time relation is applicable to the pair and the formal marking precedes the unit. This kind of formal-semantic experimental data is prime evidence for the validity of structural units larger than the sentence. The entire passage follows:

The Jackal and the Crow, Version D

0. di peq cipcang 'tangq kalak 'ti 'in.
this story jackal and crow that is

2-1. kalak-i-ki 'kur-iq khun-niq pipal-ki dongb-i
crow-one-Ag bread-one carry-sim tree-G tree-cm

'kha-laa 'de-nok; 'cila 'si 'si nying cikq tshermu 'ti-ki
on-at sit-Pdj why say say day one daytime that-Ag

tshongganqq sur 'kurq cikq khwo-nok.
shopkeeper from bread one bring-Pdj

4-3. 'tamaa cipcang-i-ki kalak 'kurq 'ti 'tsukyaaq
then jackal-one-Ag crow bread that how

Tho-Nq saap 'si-ni naasam taang-nok; 'cilaa 'si 'si
take away-sim eat say-sim thinking do-Pdj why say say

'ti kalak 'ti-ki 'kurq khwo-Nq wong-gup 'ti cipcang 'ti-ki
that crow that-Ag bread bring-sim come-Ims that jackal that-Ag

thong-nok. 6. "'tarung di-ki woru 'ti yangq tso lyemu wo-te!"
see-Pdj again this-G voice that em how nice is-may

5. "oho 'ti dongb-i 'kha-laa 'det-up kalak 'ti 'kangiq lyemu-
oho that tree-cm on-at sit-Ims crow that how nice-

yi 'nok" 'si-N 'ti cipcang sikyaa-nok.
em is say-sim that jackal say-Pdj

8-7. 'tamaa 'ti kalak-i 'kha-laa wot-up 'kurq 'ti
then that crow-cm on-at be-Ims bread that

sa-laaq pizur 'gaal-nok; kang kyaa-N 'si 'si kalak 'ti-ki
ground-at escape went-Pdj what do-sim say say crow that-Ag

nosur kyaa-ni "kakq" sikyaa-nok.
proud do-sim kak say-Pdj

Free Translation

0. This is the story of the jackal and the crow.

2-1. A crow carrying bread was sitting on a pipal tree, because one day he brought some bread from a shopkeeper.

4-3. Then a jackal was thinking how to take away and eat the crow's bread, because the crow had brought some bread and the jackal saw it. 6. "Again its voice may be extremely sweet!" 5. "Oh, how nice is the crow sitting on that tree," the jackal said.

8-7. Then the bread which the crow had, dropped down to the ground, because the crow becoming proud said "kak."

III. PRIMARY VERSUS SECONDARY REVERSAL IN RELATION TO UNDERLYING PARAGRAPHS

Now an interesting problem arose: granting the form of Version D as valid and in good style, could we again perform a reversal of sentences, on this derived version? We presented to Mr. Lama his Version D, with order 2-1-4-3-6-5-8-7, and inquired about merged 2/1, 4/3, to see if they could be reversed to 4/3-2/1; and if 4/3, 6 could be reversed to 6-4/3; or 5, 8/7 to 8/7-5. Here he rejected any further reversal. Why? Although the work is still in too preliminary a form to eliminate doubt, our tentative conclusion is this: Calling the original Version A the underlying discourse form, the first reversal of Version B as primary reversal, and the reversal of Version D, as just indicated, secondary reversal, then Sherpa allows primary reversal within underlying paragraphs as legitimate (or appropriate, acceptable, grammatical), but secondary reversal is rejected since it sharply clashes with underlying semantic-grammatical paragraphs. Once more we have evidence of the underlying validity of units larger than the sentence but in this instance building on resistance to secondary reversal.

Even in the primary reversal we see, in looking back, there was a bit of this resistance but not as strong. When for Version A we asked for no other reversal than that of 2-3 to 3-2, he at first complied but then deleted the part representing 2 as being inappropriate. Here also some initial paragraph reaction seems to have been present. On the other hand, we consider such reaction to be less strong than the resistance to the reversal between paragraphs which have already had internal reversals; the resulting logical relations are tighter than the initial chronological ones in that they resist reversal or change more strongly.

IV. DEGREE OF INVOLVEMENT

Our next step was to have Mr. Lama retell the story, in Version E, with the jackal as narrator. Here another principle begins to come into view, in which forms specify the degree of involvement of a person in the story. Before discussing this factor we define a few terms. When there is a direct quotation, we will call the quotation itself (e.g. "I saw you") the content and the indicator of the source of the quotation (e.g. "He said, ... ") the quotation margin. The quotation margin may be explicit or implicit and yet be called the margin for our purposes. The general rule: In a statement, if the subject of the quotation content is the same as the subject of the quotation margin, the verb of the content will carry a *conjunctive*[5] form; otherwise, in statements the content verb *will be marked* disjunctively. This applies also to indirect quotation or reported events.

In Version A there are no conjunctive forms because the narrator is unidentified and does not refer to himself. But disjunctive forms marked by *-nok* occur in each of the sentences 1 through 8. These fit the *disjunctive* rule since, for example, sentence 1 has the *narrator* as implicit marginal subject with a different subject--*the crow*--for the content. Similarly, in sentence 6 the *disjunctive* form is marked by *-te* (carrying, simultaneously, the meaning 'subjunctive mood'). Here *jackal* is the implicit subject of the margin with voice (of the *crow*) as subject of the content. In sentences 4,5, and 6 of Version E, a conjunctive form *-yin*/*-in* is used which fits the conjunctive rule above: the *implicit marginal* subject is *jackal*; the explicit subject of the content also refers to *the jackal*, as *nye* 'I.'

But when we come to Version E (not given here) we find one--and only one--exception: in sentence 3 a disjunctive form *-sung* ('past tense') is used. But *jackal* is the implicit *marginal* subject and also underlies the *explicit* subject *nye* of the content 'I saw it,' so that conjunctive is to be expected *by* the rule given but is not found. Why this exception? First we wondered if it were an error of narration or some kind of optional usage. Checking with two language assistants, however (including one who had not been involved in the telling of the tale), we found them vigorously insistent on retaining the aberrant form. Our current hypothesis--not tested yet against an adequate amount of material to confirm or disconfirm it--is that the disjunct form here marks a special tagmemic threshold in the sequence within the discourse structure. Often when a new character is introduced to the story an indefinite form of the noun phrase is used. But here, for reasons unknow to us, the narrator himself appears "on-stage" of the story for the first time. He introduces himself as new to the audience (or in some sense "alien" to the reader) not by employing an indefinite noun phrase but by using that form of the verb--the disjunctive--which puts psychological distance between the subject of the quotation margin and the subject of the quotation content. In other words, we hypothesize that the entrance onto the stage by the narrator-as-new-character is signalled as *disjunct-from-audience-viewpoint* by the disjunctive verb; once *he is now officially on-stage*[6], he treats himself as a dramatis persona equivalent to any other, with appropriate conjunctive and disjunctive forms in accordance with the standard rule.

The tagmeme threshold suggested would be seen further as a break between paragraphs which gives, respectively, the setting of the story and the start of the action of the tale. Here again the existence of paragraphs--or at least of *some* unit grammatically relevant beyond the sentence--is *documented*. These sentences are not merely bound by implicit "and's."

But a further complication arises when we introduce one more step, removing the narrator even further from the audience or from the event. In Version H a second jackal--Jackal$_2$--tells the story as it was told to him by Jackal$_1$. In some sense there would be no difference expected between it and Version A, where the narrator is neither the Crow nor Jackal$_1$. But there seemed to be enough possibility of complication by the partial overlap of Jackal$_1$ and Jackal$_2$ in dramatic characteristics to warrant checking.

The Jackal and the Crow, Version H

0. kalak 'tangq cipcang peq
crow and jackal story

1. nga-laa cipcang-i-ki sikyaa-wup taam. 2. nyinq cikq
me-to jackal-a-Aq say-Ims words day one

tshermu kalak-i-ki tshonggangq nasur 'kurq cikq khurq gi-nok lwo.
daytime crow-a-Aq shopkeeper from bread one bring come-P rsm

3. 'ti 'kurq 'ti khur-niq 'ti kalak 'ti 'gal-ni dongbu-yi
that bread that carry-sim that crow that go-sim tree-a

go-laa paap-sung 'si-nok.
top-at land-Pdj say-Pdj

4-5. 'ti belaa 'ti kalak 'kurq khurq wong-gup 'ti 'ti
that time that crow bread carry come-Ims that that

cipcang 'ti-ki thong-ni 'ti-ki ta 'ti kalak 'kurq 'ti
jackal that-Aq see-sim that-Aq now that crow bread that

'tsukyaaq Tho-Nq saap 'si-ni 'ti-ki lyemu rangq kyaa-N
how take away-sim eat say-sim that-Aq well only do-sim

naasam 'tang-niq 'ti 'kurq khur-upq kalak 'ti kaniru papq
thinking send-sim that bread carry-Ims crow that where land

ki-wu 'lha-yinq 'si-nok. 6. 'tamaa 'ti kalak pap-upq dongb-i
do-Ims watch-Pcj say-Pdj then that crow land-Ims tree-cm

wok-laa 'gal-ni 'ti kalak 'ti-laa nosur ku-yiNq lwo; "oho,
under-at go-sim that crow that-to pride apply-Pcj rsm oho

di dongb-i go-ki kalak 'ti kanggyapq lyemu-yi 'nok. 7.
this tree-G top-G crow that surprisingly nice-one be

'tarungaa 'ti-ki woru 'ti yangq manq kanggyap-kiq lyemu-yi-ke
still that-G voice that em more surprisingly sweet-one-cm

wo-te" 'si-ni 'mikhoro daldzaa-laa lap-upq doke kyaa-ni
be-may say-sim his own friend-to tell-Ims like this do-sim

'ti kalak-i tho-wup kyaa-ni sikyaa-yin lwo.
that crow-G hear-Ims do-sim said-Pcj rsm

8. 'tamaa 'ti kalak 'ti nosur-i-ke kyaa-ni 'kurq 'ti
then that crow that proud-a-cm do-sim bread that

'kh-eq 'nanq-laa rangq sa-yiN sa-yiN nosur kyaa-ni "kakq"
mouth-cm in-at only eat-cont eat-cont proud do-sim kak

'sir-up belaa 'kh-eq 'nanq-i 'kurq 'ti pizur-N le-sunqq
say-Ims time mouth-cm in-G bread that escape-sim come-Pdj

lwo. 9. 'tamaa 'ti-ki palaa batak butuk tok laa-
rsm then that-G turn hurriedly hurriedly quickly take-

N so-yin 'si-N nqa-laa 'ti cipcanq 'ti-ki 'si-nok.
sim eat-Pcj say-sim I-to that jackal that-Aq say-Pdj

In Version H one finds specific acknowledgment by the narrator (Jackal$_2$) of the source of his story. Jackal$_2$ calls him merely "a Jackal"--not "another Jackal"--so the animal type played no part in the report.

On the other hand, the explicitness of the statement of his source of information did lead to changes. The fact that he specified his information source made it convenient for him to disallow responsibility for the validity of the tale in a way which the narrator of Version A did not do. Specifically, the morpheme lwo 'reported speech' or 'secondhand source' occurs in sentences 2, 6, 7, and 8; while the similar 'si-nok 'he said' occurs in 3, 4/5, and 9. Furthermore, in general these reportive elements are accompanied here by indirect rather than direct quotation.

In addition to these versions of the story we have several others. Instead of the jackal telling it, the crow does so in Version G. We were hoping here that various kinds of emotional overtones--of anger, annoyance, shock, surprise--would be especially apparent; not many showed up. Perhaps we taught the informant too well that we wanted minimum changes. We may need a further version or two in which no constraints are given on length, in order to allow for greater emotional sources of change. We do, however, have here an emotional particle dza at the end of the sentence after the main verb registering 'anger,' 'sadness,' 'bad experience,' or 'difficulties'--to use terms given us for translation by our language assistant. For example:

11. batak butuk kyaa-N 'ti 'kurq 'ti lanq-qup-laaq
hurriedly hurriedly do-sim that bread that take-Ims-pur

dongb-i go na-maa sa-laaq 'gal-up dza.
tree-cm top of-from ground-to went-Ims mood

Free Translation

11. In order to catch the bread, I hurriedly went down from the top of the tree to the ground.

V. OTHER VARIANTS IN DISCOURSE STRUCTURE

When the crow as narrator might be expected to refer to himself as "I" accompanied by the conjunct verb (see above), he instead uses "I" accompanied by an impersonal-verb-plus-*dza* (but optionally may use the conjunct form without *dza*). *Thus the emotional context and particle involve changes in the total grammatical pattern of the clause.*

The Jackal and the Crow, Version I

0. kalak 'tangq cipcanq peq. 8/7 'ti kalak 'kha-laa
crow and jackal story that crow on-at

wot-up 'kurq 'ti sa-laaq pizur-N 'gaal-nok, 'cilaa 'si 'si
be-Ims bread that ground-to escape-sim went-Pdj why say say

'ti kalak 'ti-ki 'mi taam-laa nyen-ni "kakq" sikyaa-nok.
that crow that-Aq man word-to hear-sim kak say-Pdj

6. "'tarunq 'ti-ki woru 'ti yangq tso lyemu-ke wo-te. 5.
again that-G voice that em how nice-cm be-may

dongb-i go-ki kalak 'ti kanggyap-kiq lyemu" 'si-ni cipcang-
tree-cm top-G crow that surprisingly-cm nice say-sim jackal-

i-ki 'kaze kalak-laa nosur ku-nok. 4. cipcanq 'cilaa duk
one-Aq much crow-to pride apply-Pdj jackal why this

kyaa-nok 'si 'si kalak 'ti-laa lu-niq 'kurq Tho-Nq
do-Pdj say say crow that-to convince-sim bread take away-sim

saap-laa duk kyaa-nok. 3. 'ti kalak 'kurq khur-Nq wong-gup
eat-pur this do-Pdj that crow bread carry-sim come-Ims

'ti 'ti cipcang gomaa-laa-ke hako-Nq 'si-nok. 2. 'ti kalak
that that jackal already-at-cm know-sim say-Pdj that crow

'ti-ni 'kurq khur-niq saap-laa sarasaar dongbu-yi go-laa paap-
that-em bread carry-sim eat-pur through tree-one top-at perch-

nok. 1. nyinq cikq tshermu kalak-laa 'dasaa 'laave kyaa-N
Pdj day one daytime crow-to bad luck happened do-sim

'kurq khurq wwo-wup-ki 'tamaa 'miraa cipcang-ke cu kyaa-N
bread carry come-Ims-hab then someone jackal-cm trick do-sim

hakTho-Nq so-nok.
take away-sim eat-Pdj

Free Translation

0. The story of the jackal and the crow. 8/7. The bread which the crow had, fell to the ground, because the crow heard the (jackal's) talking and said "Kak." 6. "Furthermore its voice may be extremely sweet; 5. that crow on top of the tree is surprisingly beautiful"; saying that, a jackal increased the pride of the crow very much. 4. The jackal did that because he wanted to deceive the crow and take away its bread in order to eat it. 3. The jackal knew already that the crow had brought some bread. 2. It was the crow that way flying through the trees to land on top of a tree to eat the bread. 1. That day the crow had bad luck carrying its bread, and the jackal played a trick on her and took it away and ate it.

Note, for example, in merged 8/7 'cilaa 'si 'si 'because' enters; a similar expression comes in 4. Words for focus or emphasis (underscoring one of the basic reasons why sentence order is reversed under natural circumstances) show up here as they did in Version D; note in 6 the emphatic yangq and in 2 the -ni. See also the time reversal gomaa-laa-ke 'already' in 3 and the phrases or clauses (sometimes directly associated with the particles mentioned) which by affixes of past time (cf. 'happened' in 1) or by participles of associated or retroactive reference (cf. 'knowing' in 3) give to the reader a re-orientation to the reversed time sequence.

But we ask: how natural is this complete reversal? Our reply, as expected: not very natural. Mr. Lama stated that he would never tell the story this way. In a test with another Sherpa, however, it was understandable--even though Version A was preferred.

Nevertheless, a further significant hypothesis is related to the partially-negative result: Sentences cannot be indiscriminately reversed, since there are constraints upon re-ordering; but paragraphs as a whole are much less resistent to this reversal. This hypothesis has proved fruitful in work of Pike and his colleagues with other languages but has yet to be tested for the Sherpa data.

One further experiment which proved highly interesting in the work of Pike and Pike (1971) has not yet been carried far enough to give useful results with Sherpa. We tried--in Version F and others--to get an entirely different story, one with a different plot and different characters. We wanted to use the same number of characters and to preserve closely the same grammatical structure (the same immediate constituents relative to a tree diagram of the discourse--the same underlying grammatical characteristics). Thus far, we have versions which are somewhat parallel grammatically but not one which is close enough to warrant careful analysis at this stage. Later, perhaps, we can provide it. If so, we would demonstrate a further principle: The grammatical structure of a discourse can be maintained in spite of a radical difference of substituted semantic content. For evidence concerning this hypothesis, however, we must refer the reader to the article by Pike and Pike for two illustrations from English.

REFERENCES

Hale, Austin. 1971. Person markers: conjunctive and disjunctive verb forms. mimeo.

Katz, Jerrold J. and Jerry A. Fodor. 1963. The structure of a semantic theory. Language. 39:170-210.

Pike, Kenneth L. 1966. Tagmemic and matrix linguistics applied to selected African languages. Report to the US Office of Education, November, 1966. See the published version now available in Summer Institute of Linguistics Publications in Linguistics and Related Fields, 23. 1970. Norman, Okla.

_________ and Evelyn G. Pike. 1971. Seven replacement substitution exercises for studying the relation between the semantic and the grammatical structures of discourse. Paper presented to the summer meeting of the Linguistics Society of America, Buffalo, N.Y., July, 1971. To appear in Linguistics.

FOOTNOTES

[1] Schöttelndreyer is responsible for the gathering of the data and much of the analysis. Pike has provided the underlying approach and presentation.

This paper was in part supported by a grant from the U. S. Office of Education, Washington, D. C., under contract number OEC-0-9-097721-2778. It was presented to the Second All-India Conference of Linguistics, Delhi, December 1971.

[2] Conventions used in spelling:

T	[ṭ]
D	[ḍ]
c	[č]
j	[ǰ]
z	[š]
-N	nasalization of preceding vowel

Symbols used for marking tone:

q	at the end of a word signals high tone
'	single vertical stroke at the beginning of a word signals rising pitch contour

Thus four contrastive contours are marked as follows:

'...q pitch contour 1; high rising

...q pitch contour 2; high falling

'... pitch contour 3; low rising

... pitch contour 4; low level (or falling)

Grammatical Abbreviations

Ag	agentive
cm	construction marker
cont	continuous
em	emphasis
G	genitive
Ims	impersonal
Pcj	past conjunctive
Pdj	past disjunctive
pur	purposive
rsm	reported speech marker
sim	simultaneous
-	hyphen, indicates morpheme breaks

[3] That is, we reject the claim of Katz and Fodor (1963:180-81) that "in the great majority of cases, the sentence break in a discourse is simply equivalent to the conjunction and." Perhaps this error--as we see it--grows from an exaggerated conviction that a language is (merely?) a set of sentences.

[4] See Pike and Pike (1971:fn.2) for reference to New Guinea, via Gleason, where some languages allow no reversal of chronological order and hence no "before" or "after" conjunctions; and for reference to Maxakali of Brazil, via Popovich, where time reversal is also disallowed. After such startling surprises, reversal structures cannot be taken for granted and the structural constraints accompanying their occurrence require explicit investigation.

[5] Our initial insight into the presence of conjunctive--disjunctive forms is due to Austin Hale's work with Newari (1971) which is also a Tibeto-Burman language. We do not treat here the interrogatives in which (as Hale shows) the conjunct form occurs when the subject of the quotation content agrees with the object of the quotation margin (or, in his terms, the subject of the verb of the embedded sentence has the same referent as the object of the matrix sentence). On the other hand, the specification of the different levels which interests us here is not discussed in his paper.

[6] Treatment of pronominal rules affected by putative on-stage off-stage presence has been reported for other parts of the world also. See Kenneth L. Pike (1966, Section 3.2). A monograph by K. L. Pike and Jean Soutar giving some quotations from Bariba which document these materials further is in press at the University of Abadon.

Contra-Expectancy Particles in Tharu Bhojpuri[1]

Richard D. Hugoniot and Austin Hale

I. THE LEXICAL CONTENT OF -o AND -e 377
A. Simple Assertion: Expectation and Surprise. 377
B. Argumentation: Contradiction and Acquiescence . . . 381
II. THE SEMANTIC DISTRIBUTION OF THE CONTRA-EXPECTANCY PARTICLE IN DIALOGUE 384

Affixes have traditionally been treated as parts of word level structures. The particle suffixes -e and -o in Bhojpuri have also been treated in this manner.[2] The purpose of this paper, however, is to show that an adequate analysis of these particles must take into consideration far more than their function at word level. It will not be possible to exhaust the implications of these particles in this paper, but it will be possible to show that any adequate account of these particles must take into consideration their use in dialogue. Our discussion falls into two major sections: I. The lexical content of -o and -e, and II. The semantic distribution of the contra-expectancy particles in dialogue.

I. THE LEXICAL CONTENT OF -o AND -e

A. Simple Assertion: Expectation and Surprise

The use of -o and -e receives no adequate explanation in terms of monologue discourse. The choice of -e or -o in a simple assertion depends upon the relation of the assertion to certain assumptions which are presumed shared by speaker and hearer. Statements which conform to these shared assumptions are marked by -e in a simple assertion; those which violate these assumptions in some way are marked by -o.[3]

1. Sardi-e-se aone-ke nāk-me-se ponta geraita
   cold-exp-from you-of nose-in-from mucus goes
   Because of your cold you have a runny nose.

The choice of -e in the form sardi-e-se in Example 1 is controlled by the fact that the assertion in Example 1 conforms to certain expectations which the speaker assumes that he shares with his hearer, namely that those who have colds will also have runny noses. When this expectation is violated, as in Example 2, the particle -o replaces the particle--e.

2. Sardi-o hoila-parbhi aone-ke nāk-se ponta na geraiye.
   cold-exp being-although you-of nose-from mucus not going
   Even though you have a cold your nose is not running.

Another example of an assumption which may be brought into focus by the choice of -e or -o is the assumption that a buyer will purchase what he considers to be good. Example 3 conforms to this assumption and the choice of -e in the form niman-e calls attention to the fact that the speaker assumes that his hearer shares this assumption with him.

3. Niman-e hoilase ham i chu-ke kharidali
   good-exp being I this thing-of purchased
   Because this thing was good I purchased it.

Where the speaker wishes to call attention to this same shared assumption in a sentence which violates the assumption, the particle -o replaces the particle -e.

4. Niman-o rahaitai taiyona hami i chiz-ke na kharditiye
   good-exp was nevertheless I this thing-of not bought
   This thing was good yet I still didn't buy it.

Example 4 and Example 2 both employ -o to call attention to the fact that the statements violate an assumption which the speaker assumes he shares with his hearer. The effect of 2, however, is to express surprise on the part of the speaker, and the effect of 4 is that of inducing surprise in the hearer.

The interplay of -e and -o can be seen quite clearly in dialogue. Two shared assumptions appear to be operative in the following dialogue: 1) that parrots talk well, and 2) that Ram's pet is a parrot.

5. Ram: Hamra sug-o-ke bachcha bāta lekin na niman-se
        my parrot-exp-of son have but not good-from

parhaige
reads
I have a parrot but he cannot talk well.

6. Prakash: Kaise na parhaisau? Sug-o-ke bachche hau.
why not read parrot-exp-of son is
Why doesn't it talk? It is a parrot.

7. Ram: Kaa jāni kaahe-na parhaisai sug-e-ke bachcha jāne
how know why-not reads parrot-exp-of son know

nanale rahali
bring have
I don't know why it doesn't talk, but I know I have a parrot.

The -o in the form sug-o-ke in Examples 5 and 6 draws attention to the fact that Ram's pet constitutes an exception to the first assumption. The -e in the form sug-e-ke in Example 7 calls attention to the fact that Ram assumes that Prakash shares with him the assumption that his pet is indeed a parrot.

The following dialogue illustrates the use of -o to draw attention to the contradiction of an assumption which the speaker implicitly attributes to the hearer. This illustration supports the view that it is the supposed presuppositions of the hearer that are crucial to the use of -e and -o. These presuppositions may or may not be shared by the speaker.

Prakash: Hamar suga-ke bachcha niman-se parhaisai
my parrot-of son good-from reads
My parrot can talk well.

9. Ram: Sug-o-ke bachcha niman-se na parhaisai.
parrot-exp-of son good-from not reads
Parrots do not talk well.

10. Prakash. Kathi-ke bachcha niman-se parhaisai.
what-of son good-from reads
What bird does talk well?

11. Ram: Maina-ke bachcha chub niman-se parhaisai.
myna-of son very good-from reads
The myna bird talks very well.

The dialogue given in 5 through 7 may be taken as an expression of surprise while that given in 8 through 11 illustrates the elicitation of surprise through the use of a contradiction.

In the examples given to this point, the basis upon which the speaker implicitly attributes the hearer with an assumption is unspecified. It is often possible, however, to identify a basis for the attribution of such assumptions. The following dialogue may serve as an illustration:

12. Ram: Ham ghar banbaitwari lekin jadā jana na rahlebari
I house am building but many people not having

ek jana rahlebari.
one man having
I am building a house but I don't have many laborers;
I have only one man.

13. Prakash: Ek-e ādmi kahia tahle i kām-ke katam kartau.
one-exp man when to this work-of finish do
When will one man finish all of this work?

Prakash's question in Example 13 is negative in force, expressing the opinion that if only one man is working the work will not be finished very soon. The use of -e would indicate that Prakash assumes that Ram would agree with him in this opinion. After some days Prakash returns to find the house finished. Prakash greets this state of affairs with Example 14.

14. Prakash: Ek-o ādmi sab kām-ke khatam kardotai.
one-exp man all work-of finish doing
One man finished all of this work!

The choice of -o in Example 14 calls attention to the fact that the assertion of 14 violates what Prakash has assumed to be an assumption that he shared with Ram, namely that one man would not be able to finish the work within any short period of time.

Certain specific assumptions are built upon past experience. In the following dialogue, two friends, Bihari and Chandra, have known each other for some time. Bihari has never known Chandra to be a religious man or one who would go to the temple to worship. This forms the basis for the choice of -o in the form mandir-o-me in Example 17.

15. Bihari: Apne puja kare kahā jaisi?
you worship do where going
Where are you going--to worship?

16. Chandra: Ham puja kare mandir-me jaisi.
I worship do temple-in going
I am going to worship in the temple.

17. Bihari: Apne pujariwari oise mandir-o-me puja kare
you holy man so that temple-exp-in worship do

jaisi.
going
You are a holy man so you are going to the temple
to worship.

The occurrence of -o in 17, however, signals sarcasm and disbelief on the part of Bihari rather than credulous surprise.

B. Argumentation: Contradiction and Acquiescence

Thus far we have dealt primarily with examples in which speaker and hearer share certain assumptions and in which the expectedness or unexpectedness of a given situation with respect to these assumptions is highlighted by the use of the particles -e and -o. In Example 17 the use of sarcasm indicates Bihari's belief that Chandra is putting up a false front, hence highlighting the fact that Chandra's going to the temple is surprising in view of their putatively shared assumption that Chandra is not a religious man. Only Example 9 approaches a confrontation of non-shared assumptions. Example 9, however, is not intended as a serious argument but rather as an attention step calculated to gain the speaker an audience for Example 11.

In serious contradiction, -o and -e reverse their values in each alternate round. This shift of values may be interpreted as a formal indication that the assumptions marked are those of the speaker alone and are not shared by the hearer. The various dialogue possibilities presented in Examples 18 through 26 grow out of the following setting. The conversation occurs between an owner who is building a house and his foreman who is supervising the work. On the previous day the owner had told the foreman to hire one more laborer to do the work necessary to finish the house. After the owner had left, the foreman reconsidered and decided that there was more work to do than met the eye, so he managed to hire several additional laborers.

The next morning the owner arrives on the scene and is surprised to see not just one laborer but several. The following dialogue begins in an argument, the first round of which succeeds in establishing the fact that the two speakers do not share certain crucial assumptions.

18. Owner: Ek-o ādmi i kām-ke khatam kadotai tab
one-exp man this work-of finish does then

kahela besi jana rakhale.
why many people have put
One man can finish this work, so why have you hired so many?

19. Foreman: Ek-e jana i kām na khatam kare sakthai
one-exp person this work not finish do able

oise besi jana rakhcli.
so that many people I have hired
One person is not able to finish this work so that is why I have hired so many people.

In Example 18 the -o in ek-o calls attention to the fact that the presence of many laborers is in violation of the assumption which the owner has good reason to believe the foreman shares with him, namely that one worker can do the job. In Example 19 the -e on ek-e is a move in the direction of contradiction. It calls attention to the speaker's new assumption that one person cannot do the work. The -e cannot be reasonably viewed as referring to a shared assumption in this context. Once it has been established that the crucial assumption is not shared, the conversation continues as contradictory dialogue in which the values of -e and -o are reversed.

20. Owner: Ek-e ādmi i kām-ke khatam kadotai tab
one-exp man this work-of finish does then

kahela besi jana rakhale?
why many people have hired
One man is able to finish this work, so why have you hired so many people?

21. Foreman: Ex-o jana kām na khatam kare sakthai oise
one-exp person work not finish do able so that

besi jana rakhali.
many people I have hired.
One person is not able to finish the work, so I have hired many people.

In Example 20 the -e of ek-e is a reiteration of the -o in ek-o of Example 18, just as the -o in ek-o of 21 reiterates the -e of ek-e in 19. Neither party has changed his opinion, but it is now clear to both that they disagree. Expectancy based upon conflicting assumptions is replaced by contradiction of known opinions.

Suppose that the foreman acquiesces to the opinion of the owner. In this event Example 22 could replace Example 21 in the foregoing dialogue.

22. Foreman: Thik hai, ek-e ādmi-se kām chadjitai sur
right is one-exp man-from work finish and

āchā hotai.
good become
All right, one man can finish the work and this will be good.

The foreman thus has the option of maintaining his own opinion and of marking it with -o, or of acquiescing to the opinion of the owner, marking it with -e.

Suppose, on the other hand, that the owner accepts the foreman's explanation in Example 19. In this event Example 23 and 24 could replace Examples 20 and 21 respectively in the foregoing dialogue.

23. Owner: Thik hai ek-o ādmi na khatam kar saktai.
right is one-exp man not finish do able
All right, one man is not able to finish the work.

24. Foreman: Ek-e ādmi na khatam kar saktai.
one-exp man not finish do can
One man cannot finish the work.

The conversation ends in agreement, the -o in 23 showing not only contra-expectancy but also acquiescence, and the -e in 24 showing not only expectancy but also agreement.

Suppose now that instead of responding to 23 with 24, the foreman acquiesces to the initial view of the owner. In this case the foreman might respond to Example 23 with something like the following:

25. Foreman: Hamar bichar-se ek-e ādmi khatam kardete
my thought-from one-exp man finish does

shayad.
perhaps
I've been thinking perhaps one man can finish the work.

In this case -e denotes acquiescence to the owner's first statement, 18, but stands in disagreement with the owner's acquiescence in 23. This kind of switch is likely to elicit something like the following as a response from the owner:

26. Owner: Hamar-ta kuch bujaibe na karaiye tu doke
me-to some understanding not doing you say

kaise ki ek-o ādmi i kām-ke khatam
sometimes that one-exp man this work-of finish

kardotai doke kaise ki ek-e ādmi i kām
does say sometimes that one-exp man this work

na kar sakaisi.
not do can

I don't understand. Sometimes you say one man can finish this work, and then sometimes you say that one man can't finish this work.

In using both particles, the owner in essence tells the foreman, "You agree with my original statement, contrary to my expectation, especially after I agreed with you that more than one man was needed." The use of both -o and -e in 26 may be taken as an indication of perplexity on the part of the owner.

In the samples of argumentative dialogue given above, the dialogue began with a statement of surprise which by itself was not argumentative. Argumentative dialogues need not begin in this way; indeed, the dialogue given here could just as well have started directly with Example 20.

II. THE SEMANTIC DISTRIBUTION OF THE CONTRA-EXPECTANCY PARTICLES IN DIALOGUE

The particle suffixes -e and -o can occur on nouns, pronouns, adjectives, adverbs, and numerals. The occurrence of -o or -e on a given lexical item draws attention to the relationship of that item to certain presupposed assumptions of the speaker. They focus upon that which elicits or expresses surprise, or elicits or expresses agreement or disagreement. To show how this works, we have selected five statements differing in placement of contra-expectancy particles. We discuss how this difference in placement influences the way in which the sentence is understood.

27. Hamr-o-ta gahum-e lebeke bichār rahai lekin paisa na
I-exp-emph wheat-exp will take thought was but money not

puglase na letari.
enough not took
I was thinking to buy wheat, but I discovered that I hadn't taken along enough money.

Hamr-o-ta is subject both of 'thinking to buy wheat' and of 'hadn't taken along enough money.' The -o in this form expresses the incongruity of the two predicates and the fact that the second predicate is surprising in light of the first. The second predicate violates the expectation of hearer and speaker alike. The -e on gahum-e calls attention to the speaker's presupposition that buying wheat violates no expectation of the hearer.

28. Hamarta gahum-o lebeke bichar rahai lekin paisa na
I wheat-exp will take thought was but money not

puglase na letari
enough not took
(When) I decided to buy wheat, (I discovered) that I didn't have enough money.

Example 28 would be appropriate in describing a situation in which the speaker had not originally planned to buy wheat. The -o on gahum-o indicates that the decision to buy wheat ran counter to prior expectations.

29. Hamar bichar-o rahai gahum-o lebeke lekin paisa na
my thought-exp was wheat-exp but but money not

puglase na leli
enough not took
I had planned to buy wheat but (found) that I had not brought along enough money.

Example 29 would be appropriate in recounting a situation in which the speaker had previously agreed with the shopkeeper to buy wheat. The two occurrences of -o call attention to the unexpectedness of the speaker's failure to bring sufficient cash.

30. Hamarta gahum-o lebeke bichar rahai lekin pais-o na
I wheat-exp to take thought was but money-exp not
I was planning to take wheat but (found that) I didn't have
puglase na leb
enough not took
I was planning to take wheat but (found that) I didn't have
enough money.

Example 30 would be appropriate in recounting a situation in which the speaker calls attention to the fact that he discovered his lack of money only as he was getting his money out to pay for the wheat. Money is thus presented as the focal point of surprise.

31. Hamarta gahum-o lebeke bichar rahai lekin paisa pugl-
I wheat-exp to take thought was but money enough-

o-se kati hati jabki debin na karaitai.
exp-from what happen when give not doing
I was thinking to buy wheat and I had enough money, but the
shopkeeper wouldn't give it to me.

In Example 31 the focal points of surprise are wheat and enough. These are surprising in view of the fact that the shopkeeper refused to sell the speaker wheat. These examples suffice to illustrate the contention that different placement of contra-expectancy particles results in different foci of surprise. They do not suffice to provide a principled basis upon which the interpretation of these particles in any given context can be determined. For this a great deal of additional analysis will be required. What has been presented, however, should suffice to make our main contention plausible, namely that the function of these particles is not adequately accounted for in a description which deals with them only in terms of their word level functions. Some account of dialogue will be required in any adequate account of these particles.

REFERENCES

Hugoniot, Richard D. (Ed.). 1970. Bibliographical index to the lesser known languages of India and Nepal. Waxhaw, North Carolina: Summer Institute of Linguistics, p. 312.

Kellogg, S. H. 1875. A grammar of the Hindi language in which are treated the high Hindi, Braj, and the eastern Hindi of the Ra'ma'yan of Tulsi Das, also the colloquial dialects of Rajputana, Kumaon, Avadh, Riwa, Bhojpur, Magadha, Maithilā, etc. London: Kegan Paul, Trench, Trübner, & Co. Ltd., p. 584.

Lakoff, Robin. 1970. Questionable answers and answerable questions. (To appear in Braj B. Kachru, et. al. (ed) Issues in linguistics: Papers in Honor of Henry and Renée Kahane, Urbana: University of Illinois Press)

Longacre, Robert E. 1968. Discourse, paragraph, and sentence structure in selected Philippine languages, Volume II, Sentence structure. U. S. Department of Health, Education, and Welfare, Office of Education, Institute of International Studies, especially pages 142-147.

Tiwari, U. N. 1960. The origin and development of Bhojpuri. Asiatic Society of Calcutta, monograph series, Volume X, p. 282.

FOOTNOTES

[1] We would like to express our gratitude to Kenneth L. Pike and Ronald L. Trail for valuable suggestions and comments on this work. The research leading to this paper was in part supported by the Institute of International Studies, Office of Education, U. S. Department of Health, Education, and Welfare. The dialect of Bhojpuri under analysis in this paper is that spoken in the village of Santpur in Rautahat District of Narayani Zone. This particular dialect is spoken by the Tharu people of Rautahat. Bhojpuri is spoken by over 200,000 people in Nepal and by over 25 million people in India. According to Tiwari, 1960, there are four major dialects: standard North Bhojpuri, standard West Bhojpuri, standard South Bhojpuri, and Nagpuria. Bhojpuri extends as far south as Ranchi, Bihar, as far east as Patna, Bihar, as far west as Mirzapur, Uttar Pradesh, and as far north as Nepal.

The examples used in this paper were supplied by Chandar Sikhar Chaudhary who has shown an unusual ability to relate utterances to a natural situational context. Much of the elicitation was done by presenting situations and asking Mr. Chaudhary to supply verbal material appropriate to the situation.

[2] U.N. Tiwari, 1960, treats -e and -o as a part of word level structure. "The emphatic forms of adjectives are made by adding -ō . . ." (1960.117). Tiwari's own example, however, is also open to the interpretation that -o marks counter-expectation. He gives the following example:

I ām khaTō bā miThō bā.
this mango sour is sweet is
This mango is both sour and sweet.

Mangoes usually are either sour (when not ripe) or sweet (when ripe). Mr. Chaudhary is of the opinion that it would be a very surprising situation for a mango to be both sour and sweet.

[3] In the examples given, we have underlined the word in the free translation which lies within the scope of the expectancy particle. All words except verbs have been analyzed into morphemes. Our analysis of verb morphology is not sufficiently complete to warrant an attempt at analysis at this time.

[4] Tiwari, 1960, indicates that he has found -ō only as an emphatic marker occurring with adjectives. In Tharu Bhojpuri we have found -o occurring also with nouns, pronouns, adverbs, and numerals.

Chaining and Spotlighting:

Two Types of Paragraph Boundaries in Sunwar

Marlene Schulze and Dora Bieri[1]

I. EVENT CHAINING AS PARAGRAPH BOUNDARY 390
  A. Chaining with Identical Verb Phrases. 391
  B. Chaining with Temporal Reference. 392
    1. Sequence of Events 393
    2. Simultaneous Events. 394

II. CAST SPOTLIGHTING AS PARAGRAPH BOUNDARY 396

The purpose of this paper is to present some of our early findings on paragraph boundaries in Sunwar[2] in the hope of stimulating parallel research in related languages. The original stimulus for this work came from Grimes and Glock (1970).

Two major types of fables and stories can be distinguished in Sunwar: event-focused fables and stories and participant-focused fables and stories.[3] In event-focused discourse, plot structure is prominent. Temporal sequence of events is important. The thread which holds the discourse together is the sequence of events upon which the story depends for its coherence. In participant-focused discourse, the cast is prominent. The events are important as they depict and describe the cast. The thread which holds the discourse together is the cast itself. These are character studies and the events are held together in coherent discourse by virtue of the fact that they share participants. The events themselves may never quite add up to a coherent plot.

I. EVENT CHAINING AS PARAGRAPH BOUNDARY

We have found two types of event chaining which function as paragraph boundaries: chaining with identical verb phrases and chaining with temporal reference. Chaining with identical verb phrases apparently has no temporal or sequential function but functions simply to mark the end of one paragraph and the beginning of another. Chaining with temporal reference does have a temporal function. It relates the two paragraphs in time, either as being in non-overlapping sequence or as overlapping in time. They may mark either an "after" relation or a "while" relation.

Event chaining in its function of paragraph bounding involves the repetition of certain elements. Repetition of elements may also occur paragraph medial, but the two are quite distinct. Firstly, they differ in intonation pattern. In paragraph-bounding (chaining) repetition, a sentence-final intonation must precede the second link; in paragraph-medial repetition, a sentence-non-final intonation precedes every repetition.

... ‾‾\/// paragraph bounding (chaining)

... _/‾/ _/‾/ _/‾/ _/‾/... paragraph medial

Secondly, the repetitions differ in degree of iteration. Chaining generally involves only two occurrences of a given string (Example 2), whereas paragraph-medial repetition may involve as many as five occurrences (Example 1). The paragraph-medial repetition of the verb stem plus person marker signals emphasis. The number of repetitions marks the degree of intensity.

1)

minu-da	paan	dzana	dum-sha	/	la-ma	/	la-ma	/	la-ma	/
and-el	five	people	become-sm		go-3pl		go-3pl		go-3pl	

la-ma	/	la-ma	/	meko	a	dzaak-dit-tike	khiin-mi
go-3pl		go-3pl		that	his	arrive-Lr-N	house-L

trekkay	dzaak-dim-ma	'baakt	///[4]
quickly	arrive-Lr-3pl	pp	

And after they were five men, they went and went and arrived quickly at his house.

2)

tin	dzana-mi	'suld-me	/	'suld-me	/	'kay	'thin-ne
three	people-ag	feel-3pl		feel-3pl		no one	find-auxR

ma-tsap-me	'baakt.	///
neg-can-3pl	pp	

Three men were groping around, yet no one could find it.

A. Chaining with Identical Verb Phrases

In this form of paragraph boundary, the independent clause which ends a paragraph is uttered with a falling, sentence-final intonation followed by a pause. The following paragraph begins with a repetition of this clause, uttered with a level, sentence-non-final intonation.

3) bii 'gyap-nu /// bii 'gyap-nu / ...
cow buy-1s,np cow buy-1s,np

I will buy a cow. I will buy a cow, ...

4) 'kay gaak-tsa ma-gew-a 'baakt /// 'kay gaak-tsa
no one walk-inf neg-give-3s pp no one walk-inf

ma-gew-a 'baakta / ...
neg-give-3s pp

Nobody was allowed to pass. Nobody being allowed to pass, ...

Certain variations are allowed in this type of chaining. A linking -a, apparently meaningless, may be suffixed to the last verb of the paragraph-initial chaining clause, as in Example 4, 'baakta.' This -a never occurs in the paragraph-final clause and is a segmental concomitant of linking intonation.

The order of elements may be changed in chaining of this sort. Emphatic order often occurs in paragraph-final position, rarely in paragraph-initial position. Emphatic order involves placing the emphasized word or phrase in sentence-final position, following the end of the sentence-final intonation. The emphasized element receives its own, essentially level intonation. The emphasized word or phrase may be repeated, or it may be omitted in the paragraph-initial chaining clause.

5) minu meko khuy oo-ma 'baakt aga ///
and these thieves enter-3pl pp inside

khuy aga oo-ma 'baakta / ...
thieves inside enter-3pl pp

And these thieves entered into the house. Having entered into the house, thieves ...

6) 'neil din kohdra taar laa gaak 'baak-maakt meko mur ///
all day horse back only go be-3s,pp that man

minu kohdra taar laa gaak 'baak-m-akta / ...
and horse back only go be-3s,pp

All day that man was riding the horse. He was riding the horse, ...

Note that chaining with identical verb phrases allows omissions:

7) meko busu oo-maakt /// oo-maakta / ...
that snake enter-3s,pp enter-3s,pp

The snake entered. After having entered ...

8) kaabu da meko as-ke rikle nak thi-sho al-kaa
one day el that their-of small new born-adj child-one

'baak-maakt-ne /// nak thi-sho al-kaa 'baak-maakta / ...
stay-3s,pp-ri new born-adj child-one stay-3s,pp

One day a baby was born to them. A baby having been born ...

In Example 8 above, -ne is a discourse-oriented speech marker. It indicates that the storyteller is not responsible for the truth of the content, because he is not an eye witness of the events reported. Phonologically -ne behaves as a suffix of the verb fused into the sentence-final intonation.

B. Chaining with Temporal Reference

In this form of paragraph boundary, some type of temporal relation is stated between the paragraph-initial chaining clause and the material that follows. The intonational signals for the paragraph boundary are essentially the same as described in Section A. The paragraph-final clause will end with a falling intonation followed by pause. The paragraph-initial clause which follows will manifest a sentence-non-final intonation. Emphasized elements will follow the paragraph-final clause and are preceded by sentence-final intonation. The emphasized element carries level intonation.

9) baat 'pam-se 'baakt /// baat 'pa-sh liik-sha nga mina / ...
talk do-3d pp talk do-sm finish-sm and then

The two talked. Having talked, then ...

10) rawa tohdro-mi oo-maakt /// rawa tohdro-mi oo-sh
tree hole-L enter-3s,pp tree hole-L enter-sm

liik-sha nga mina / ...
finish-sm and then

He entered a hollow tree. Having entered a hollow tree, then ...

11) 'noole phas 'upt-a 'baakt-ne gar-kaa-mi /// phas
after flour store-3s pp-ri jug-one-L flour

'up-sh liik-sha nga mina / ...
store-sm finish-sm and then

Afterwards he stored flour in a jug. Having stored flour, then ...

Two types of temporal reference are possible. The chained clause may occur previous to and in sequence with what follows it, or the chained clause may overlap in time with the action or state referred to in the following material.

1. Sequence of Events

Sequence in chaining is signalled by the affix -sha or by -sh liik-sha on the verb stem of the paragraph-initial chaining clause. The verb liik-tsa means 'to finish' and the affix -sha marks accomplished action. That the action has been accomplished is further emphasized by the sequence -sh liik-sha following the verb stem.

Examples with -sha only:

12) kyarsh 'gyap-nu /// minu kyarsh 'gyap-sha nga mina / ...
goat buy-1s,np and goat buy-sm and then

I will buy a goat. And having bought a goat, then ...

13) 'say ngoynti 'bwaaki-mi 'marko siware-mi 'tsayb 'pa-sho
once before jungle-L int jackal-ag young ones do-st

'baak-maakt /// siware-m 'tsayb 'pa-sha nga mina ...
stay-3s,pp jackal-ag young ones do-sm and then

Once upon a time there was a jackal in a jungle giving birth to small jackals. Having given birth to little ones, the jackal ...

Examples with -sh liik-sha:

14) baat 'pam-se 'baakt //// baat 'pa-sh liik-sha nga mina / ...
talk do-3d pp talk do-sm finish-sm and then

The two talked. Having talked, then ...

15) kutsum 'sad-a 'baakt /// kutsum 'saysh-sh liik-sha
dog kill-3s pp dog kill-sm finish-sm

nga mina / ...
and then

He killed the dog. Having killed the dog, then ...

Note that -sha or -sh liik-sha replaces any person markers which may have occurred in the paragraph-final chaining clause. Thus in the paragraph-final clause of Example 14 we find baat 'pam-se 'baakt 'talk do-3d pp,' whereas in the following paragraph-initial clause, the person marker -se is replaced by the sequence marker -sh liik-sha. This fact reinforces our view that events are in focus in this type of paragraph boundary, not participants.

The variations allowed under chaining of this kind are essentially the same as those allowed in non-temporal chaining. Note in Example 16 how the order of elements is changed because of emphasis. In the paragraph-initial clause, the emphasized element is omitted.

16) 'noole phas 'upt-a 'baakt-ne gar-kaa-mi /// phas
after flour store-3s op-ri jug-one-L flour

'up-sh liik-sha nga mina / ...
store-sm finish-sm and then

Afterwards he stored flour in a jug. Having stored flour, ...

The omission of the time element from the paragraph-initial clause is illustrated in Example 17:

17) kaabu 'naakdo-da baat 'pam-se 'baakt ///
one night-el talk do-3d pp

baat 'pa-sh liik-sha nga mina / ...
talk do-sm finish-sm and then

One night the two of them talked. Having talked, ...

In Example 18, the subject of the paragraph-final clause, expressed as a noun phrase, fails to reoccur in the paragraph-initial clause:

18) meko dzoy anteen-se 'baakt /// anteen-sh
that leopard scare-3s, re pp scare-sm

liik-sha nga mina / ...
finish-sm and then

That leopard was scared. Having been scared, ...

2. Simultaneous Events

Temporal overlap in chaining is signalled by the affix -nu on the verb stem of the paragraph-initial chaining clause. The affix -nu may be glossed 'while', 'during', or 'as'.

19) bus-kaa dzaak-maakt /// bus-kaa dzaak-me-nu-da / ...
snake-one arrive-3s,pp snake-one arrive-3s-sim-el

A snake arrived. As the snake was arriving ...

20) bre-th dzaak-ma 'baakt /// bre-th dzaak-ma-nu / ...
call-pu arrive-3pl pp call-pu arrive-3pl-sim

They arrived to call (for him). As they were arriving to call

Note that -nu does not replace person markers in the way that the sequence marker -sha or -sh liik-sha does.

Considerable variation under chaining is allowed. Example 21 shows that additions in the paragraph-initial chaining clause are possible (in this instance, the temporal element minu-da).

21) mal-th gaak-maakt /// minu-da mal-th gaak-me-nu-da / ...
seek-pu go-3s, pp and-el seek-pu go-1s-sim-el

He went to search. And while he was searching ...

Omission of elements is another, very common, kind of variation. It is taken for granted that the paragraph-initial chaining clause is understood even if a pronoun replaces the whole noun phrase of the paragraph-final clause. Temporal and connective elements may also be optionally omitted in the paragraph-initial clause.

22) 'diisa eko hahti 'da-sha nga mina /
the next morning this elephant tired-sm and then

kuy-b /// eko 'da-sha ku-me-nu / ...
come-up-3s,np this tired-sm come up-3s-sim

The next morning, being tired, the elephant will come uphill. As he was coming uphill tired ...

Both additions and omissions may occur. In Example 23 only the verb stem is identical in both the paragraph-final and the paragraph-initial chaining clauses, and new information is given.

23) pheri lesh-sha gurur pa pi-maakt /// pi-me / pi-me /
again return-sm ruh do come-3s,pp come-3s come-3s

pi-me / koo-n koo-n / pi-me-nu / ...
come-3s look-c look-c come-3s-sim

Turning back again he came quickly. While he was coming he was constantly looking.

II. CAST SPOTLIGHTING AS PARAGRAPH BOUNDARY

Participant-focused discourse makes use of participant spotlighting to mark paragraph boundaries. Paragraph boundaries marked in this way generally involve some mention of stage setting, such as time and place, as well as shift of the spotlight to a different participant. The sentence-final falling intonation and pause which mark the end of a paragraph are the same for participant-focused discourse as they are for event-focused discourse. The absence of chaining in participant-focused discourse and the central importance of cast serve to distinguish the two major types.

24) 'noole a dagyu-kali biha 'paa-me 'baakt ///
after his elder brother-ben wedding do-3pl pp

minu meko a pahy laata biha 'pa-tsa
and that his younger brother mute wedding do-auxR

ma-dum-ba / ...
neg-become-3s,np

After that, they arranged a marriage for the elder brother. A marriage arrangement for the younger brother was impossible, because he was a mute.

25) dok rap 'paysh-sha nga mina / wod-a 'baakt /// minu
up stand cause-sm and then put-3s pp and

'hoole arko muru-mi 'pi-sha / ...
after other man-ag come-sm

He made the (cadaver of his ox) stand upright (in a barley field). Then a man came along ...

Several kinds of spotlighting boundaries have been observed. Examples 26 and 27 both taken from the same text, show that the spotlight may fall on a new participant or it may revert to a participant already introduced. In 26, meko a dagyu 'his elder brother' is mentioned for the first time in the story, and in 27 he is referred to again.

26) ma-dzoo-b taw thi-maakt /// minu-da meko a
neg-clever-adj son born-3s,pp and-el that his

dagyu tsihiin / ...
elder brother however

She gave birth to a stupid son. And his elder brother, however, ...

27) ... khiin dzaak-maakt /// minu meko a dagyu-m
house arrive-3s,pp and that his elder brother-ag

'tup-sha nga mina / ...
beat-sm and then

... he arrived at his house. After having beaten him, his elder brother ...

The introduction of a new participant requires a noun phrase to describe him. A participant already introduced may be referred to by a pronoun, but a pronominal reference often signals that the spotlight is shifting from the pronominal referent to some other member of the cast. The following example is taken from the beginning of a story in which a business man and his dog play the leading roles. Sentence one and two introduce the business man. In sentence three he is referred to by a pronoun and the dog is already coming into the spotlight. In sentence four, the man is in the background and the dog is in focus.

28) 1. 'say bessa kyet 'paysh-sho mur-kaa 'baak-maakt //
once much money make-adj man-one stay-3s,pp

2. minu nga mina meko mur nikay pasal 'daysh-sha nga
and and then that man many shop keep-sm and

mina / meko mur-ke kyet 'shush 'baak-maakt // 3. minu
then that man-of money much stay-3s,pp and

meko-mi kutsum-kaa thul-sho 'baak-maakt // 4. meko kutsum
that-ag dog-one feed-st be-3s,pp that dog

thul-a / thul-a / thul-a / meko loo 'nell zan-b
feed-3s feed-3s feed-3s that talk all understand-N

dum-maakt meko kutsuma-mi //
become-3s,pp that dog-ag

1. Once there lived a rich man. 2. This man made a lot of money by keeping many shops. 3. He had been feeding a dog. 4. After having been fed for a long period of time, the dog came to understand human language.

The initial clause of a paragraph gives some information about time or place. In Example 29, meko deesa-mi 'in that country' gives information about where the following part of the story will take place. At the same time the new participant is introduced in a very impressive way: a big, important, and rich man.

29) ... theeb dees-kaa dzaak-dim-maakt /// meko deesa-mi
big country-one arrive-Lr-3s,pp that country-L

theeb allakhe tahni mur-kaa 'baak-maakt //
big important rich man-one stay-3s,pp

... he arrived in a big country. In this country lived a great, important, and rich man.

Not every shift of subject, however, marks the beginning of a paragraph (see Example 28). Paragraph-medial shifts differ from spotlighting in their intonation pattern. Paragraph-medial clauses which introduce a new subject are preceded by a short fall and a short pause, whereas paragraph boundaries are marked by long falling contour and long pause. In paragraph-medial position, stage setting before a new subject has not been observed.

Example 30 is the final paragraph of a story about two brothers which further illustrates shift of subject. The younger one, handicapped by deformity of his body, got cheated by his elder brother. Through cleverness the younger finally got rich and the elder, by stupidity, got very poor. The first sentence of the closing paragraph describes the situation of the elder brother. Sentences two and three tell about the wealth of the younger brother. Sentence four shifts back again to the elder brother.

30) 1. minu 'noole a dagyu tham prung dum-maakta //
and after his elder brother very poor become-3s,pp

2. meko a pahy laata 'thampa kyet thiy-b
that his younger brother mute very much money touch-adj

mur dum-sha nga mina / 'baak-maakt // 3. minu nga mina 'noole
man become-sm and then stay-3s,pp and and then after

tehrey 'shush tahni dum-maakt meko laata // 4. a
very very rich become-3s,pp that mute his

dagyu tsihiin puyn-sha 'dzay-b dum-maakt ///
elder brother however beg-sm eat-adj become-3s,pp

1. After this event the elder brother got very poor. 2. His younger brother the mute, having made so much money, stayed very rich. 3. Later on the mute became enormously rich. 4. His elder brother, however, became a beggar.

Conclusion

We have indicated that there are at least two distinctive types of paragraph boundary in Sunwar discourse. We have suggested that these two types of boundary are correlated with two discourse types: event focused and participant focused. The characteristics of the boundaries themselves support this suggestion quite naturally.

REFERENCES

Grimes, Joseph E. and Naomi Glock. 1970. A Saramaccan narrative pattern. Language 46.408-25.

FOOTNOTES

[1] The authors are indebted to Dr. Austin Hale for his critical reading of this paper and particularly for his helpful suggestions as to wording and style.

[2] For additional information on the Sunwar language, refer to Footnote 2 in Bieri-Schulze, An approach to discourse in Sunwar, which follows this paper.

[3] For examples of these two discourse types, see Texts 8-11 in Appendix B of Bieri-Schulze, An approach to discourse in Sunwar, following this paper.

[4] A key to abbreviations used in the examples is given in Appendix A of the following paper.

An Approach To Sunwar Discourse[1]

Dora Bieri, Marlene Schulze and Austin Hale

I. THE IDENTIFICATION OF SPEECH ACTS IN SUNWAR 402

II. THE IDENTIFICATION OF DEVELOPMENT TYPES IN SUNWAR . . . 404
  A. Monologue Development Types 404
    1. The Reportive Development Type 405
    2. The Processive Development Type. 410
    3. The Expositive Development Type. 411
    4. The Narrative Development Type 412
  B. Paragraph Development Types 415
    1. Backbone Paragraphs. 416
    2. Focal Content Paragraphs 422
    3. Tributary Material Paragraphs. 425

III. THE RELATIONSHIP BETWEEN SPEECH ACTS AND DEVELOPMENT TYPES IN SUNWAR 428

The linguistic study of discourse borders on the study of rhetoric since both disciplines are concerned with the effectiveness of various speech acts. When people speak they are indeed doing things, as the title of one of J. L. Austin's books (1965) would remind us. In this paper we are concerned with the way in which speakers of Sunwar act with words.[2]

We have assumed that a speaker must identify his speech act in some way and that the hearer must be able to recognize this identification. Were it not the case that speech acts are typically identified, we would have conversations in which a speaker asks a question and his hearer responds by contradicting an assertion, or conversations in which a speaker exhorts his hearer only to have the hearer respond by answering a question. Such failures of communication are relatively rare, and this rarity implies that some system exists by means of which a speaker identifies his speech act to his hearer.[3] It is this system that we will be examining briefly in Section I.

A speech act is a function which is performed by a structure which we have called the development type. Development types have internal structure, and the various elements which make them up must be properly distinguished if they are to be perceived as intelligible, coherent, and significant. The backbone which lends coherence must be distinguishable from the focal content which lends significance, and both of these must be distinguishable from the tributary material which makes the whole intelligible. How this is done and how these elements are related depends upon how the speech act is developed. It is this system of strategies for topic development that occupies our attention in Section II.

Not all strategies are appropriate for a given speech act. The few constraints that we have noted thus far are presented in Section III.

I. THE IDENTIFICATION OF SPEECH ACTS IN SUNWAR

A speech act is the implementation of the intention of a speaker toward his hearer. If he is to express his intention effectively, the speaker must know (though perhaps only implicitly) the system which his language provides for the identification of the various speech acts. He must be able to differentiate in one way or another between the various possible speech acts, choosing appropriately among the markers which distinguish, for example, between monologues which inform and those which exhort. Likewise, the hearer must know how to interpret these markers if he is to recognize the speech acts which the speaker performs. Successful communication is possible only where speaker and hearer share the same system for the identification of speech acts. If they do not share the same system, the hearer is likely to misidentify the speaker's speech act and when he does, communication will fail. In this section we will consider certain ways in which a limited set of rather general kinds of speech acts are identified in Sunwar.

We will restrict our attention to just four of the speech acts which are distinguished in Sunwar. A speech act in Sunwar may be direct or it may be indirect; it may be informative or it may be hortative. The four types we will consider result from the combination of these two sets of options. They are 1) direct informative speech acts, 2) direct hortative speech acts, 3) indirect informative speech acts, and 4) indirect hortative speech acts.

The main criterion which distinguishes direct speech acts from indirect ones is the distribution of focal content within a given topic development. It now appears that developments which we would in any event wish to view as indirect are all characterized by bundling of focal content, usually at the end of the development. By contrast, developments which we would describe as direct are all characterized by a scattering of focal content throughout the development. To what extent this correlation will hold for other languages remains to be seen.

The main criterion which distinguishes informative speech acts from hortative ones is the mood marking of focal content. Informative speech acts have focal content which is indicative in mood; hortative speech acts have focal content which is imperative in mood. In Figure 1, the four major speech acts that will concern us in this paper are listed in cells which are defined in terms of the major criteria which identify them.

DISTRIBUTION OF FOCAL CONTENT	MOOD OF FOCAL CONTENT	
	Indicative	Imperative
Scattered	Direct informative	Direct hortative
Bundled	Indirect informative	Indirect hortative

Figure 1. Four major speech acts in Sunwar.

The identification of speech acts in Sunwar may thus be seen to rest crucially upon what we have called focal content. This is as it should be since focal content is that which answers most directly to the situation or complication which elicited the speech act. It also explains how it is that a text in isolation may be ambiguous as a speech act. It is often impossible to identify the focal content of a given speech act apart from the context which elicited it.

Text 7 was elicited by asking the language helper to imagine that he was the mother of a boy who was to leave home for a few days to take care of the family livestock. The language helper addressed this imagined situation with instructions to the boy as to what he would do while away caring for the animals. These instructions constitute the focal content of the speech act. They are imperative and are scattered throughout the text. The text thus qualifies as a direct hortative speech act.

Text 1A answers to a somewhat less hypothetical situation. Ten days before the text was elicited the language helper had been sent to the village to accomplish four specific tasks. Upon his return he was simply asked to give a report of his trip. Though no mention was made of these four tasks when the report was elicited, the language helper took the opportunity to report on each of the four tasks. This aspect of the account is distributed throughout the speech act and is indicative. Text 1A, accordingly, is an example of a direct informative speech act.

Indirect speech acts generally begin with an example or illustration and verbalize their points or focal content only at the end of the discourse. Text 9 may be taken as an explanation of the fact that leopards do not climb trees. Taken in this way, it is an example of an indirect informative speech act since, under that interpretation, the explicit focal content is fairly well concentrated in the final paragraph and is indicative in nature. Similarly, Text 10 may be taken as exhortation against being greedy. Explicit focal content is concentrated in the final paragraph and is imperative in nature. Text 10 by this interpretation qualifies as an indirect hortative speech act.

II. THE IDENTIFICATION OF DEVELOPMENT TYPES IN SUNWAR

The kinds of strategies available to the speaker of Sunwar for the performance of various speech acts do not appear to be limitless in number. The strategies employed for exhorting and for imparting information appear rather to be relatively few in number. We will refer to such strategies as development types. In this study we tentatively identify development types at two levels. There are strategies which apply to the overall development of paragraphs within the monologue. We will discuss monologue development types in Section A and paragraph development types in Section B.

A. Monologue Development Types

As a strategy for the performance of a speech act, a development type must allow for the identification of backbone, focal content, and tributary material.[4] Within the four speech acts which we have examined, however, the criteria for distinguishing among development types all relate to the backbone. The surface manifestation of contrasts among development types is of three kinds. There are contrasts in the kinds of coherence conditions which apply. Three of the development types we have distinguished (reportive, processive, and narrative) must have backbones which are chronologically ordered. One of the types (expositive) need not be chronological but must have conceptual or topical coherence.

There are contrasts in the tenses permitted for finite verbs in the backbone. Reportive developments require the tense of personal experience (past 1). Processive developments require the tense of projected time (non-past).[5] Expositive developments allow all tenses. Narrative developments require the remote past tense (past 2).

There are contrasts in the persons allowed as subjects of verbs in the backbones of the various development types. A reportive development requires first person subjects. A narrative development requires third person subjects. A processive development allows either a first or a third person subject (or, if in a direct hortative speech act, an impersonal subject). An expositive development allows all persons as backbone subjects. These contrasts among development types are summarized in Figure 2.

Development Type	Person of Backbone Subjects	Tense of Backbone Verbs	Backbone Coherence Constraint
Reportive	1st	Past 1	Chronological
Processive	1st or 3rd*	Non-Past	Chronological
Expositive	Any Person	Any Tense	Conceptual
Narrative	3rd	Past 2	Chronological

Figure 2. Contrasts among development types in Sunwar. *When direct informative - when direct hortative then impersonal

We will now consider each of the four development types individually.

1. The Reportive Development Type

Backbone. The reportive development type develops a topic which involves a personal experience. Personal experiences are told in the first person and in past 1, the tense of personal experience. The backbone of the reportive development type may consist of a chain of locations, as in a travel report of which Texts 1 and 1A are examples; of a chain of temporal sequence, as in a diary or journal account of which Text 2 is an example; or of a chain of events, as in an event-focused report of which Text 3 is an example.

Consider first the backbone of a travel report. The chain of locations in a travel report is identified by the fact that transitions are introduced largely in terms of motion verbs such as go, leave, walk, come, arrive, return, and the like. A travel report is usually bounded by an initial departure and an arrival at a final destination. In Text 1, the point of departure is identical to the final destination, though this is certainly not always the case, as is illustrated in Text 1A where they differ.

Text 1 begins as follows:

1. 'sinaakt go warts grum-th la-ti. 2. minu aan
yesterday I friend meet-pu go-1s,p and my
Yesterday I went to meet a friend. And having

khiin-le pa nga mina, warts grum-th khaping la-nga-nu, warts
house-from do and then friend meet-pu Khaping go-1s-sim friend
left my house and gone to Khaping, I did not find (my) friend.

ma-'thid-u.
nge-find-1s,neg

and ends as follows:

15. yi-sha eko khiin dzaak-sha nga mina, ama
come down-sm this house arrive-sm and then mother
Having come down, having arrived at this house, mother

baabu khame ke-sha nga mina, 'baak-sho 'baak-taakse. 16. minu
father food cook-sm and then stay-st stay-3d,p and
and father having cooked the food, they stayed there. And

'dza-sho. 17. minu baat pa nga mina, 'ip-tak.
eat-pi and talk do and then sleep-1pl,p
having talked, we slept.

18. minu go aan-ke warts grum-th 'la-sho loo ho.
and I my-of friend meet-pu go-st speech is
This is my speech about meeting a friend.

Places of departure and arrival are designated in relationship to the place that the speaker and the hearer find themselves at the time the report is given. Text 1 was given in the house of Schulze and Bieri in the village of Sabra, which is a different house from the one the language helper lives in. His designation, aan khiin-le 'from my house' serves to distinguish his point of departure from the place at which the speech act occurred. Text 1A, by contrast, was given in the house of Schulze and Bieri in Kathmandu, the same house in which the language helper was staying at the time. Thus the point of departure in Text 1A is simply ake-le 'from here.' Text 2 begins as follows:

1. gopuki ake-le la-sha nga mina, saber 'mar
we here-from go-sm and then a few days ago what
Having left from here a few days ago, what was done?

'pa-sho deensha hana, erikha monikha gopuki saan ake-le
do-pi rhet,qu Erika Monika we three here-from
Erika, Monika, and I--we three went by plane from here to Jiri.

hawaydzaadz-m dziri dzam 'la-sho.
plane-L Jiri to go-pi

The fact that the point of initial departure and the point of final arrival differ from one another in Text 1A is marked by the suffix -dish 'remote location' in the verb of sentence 52.

52. minu khiin dzaak-dish-sha tsihiin, 'mar dum-t
and house arrive-Lr-sm however what become-3s,p
And having arrived at home, however, what happened?

deen-sha hana, gopuki baadze-kali 'itska aswadi 'laysh-sha
rhet.q we grandfather-ben little medicine take-sm
We had been taking along some medicine for grandfather.

la-sho 'na-ki.
go-st,p be-1pl

The backbone of a travel report consists of a chain of departures and arrivals stretching from the initial departure to the final arrival. For examples, see Texts 1 and 1A.

Consider now the backbone of a diary or journal report. The backbone of this reportive sub-type consists of a sequence of time frames rather than of a sequence of locations as in the travel report. A diary or journal report is usually bounded by an initial time specification and a final temporal synopsis. Text 2, for example, begins as follows:

1. 'mul suni go sunikana 'book-ti. 2. minu khame
now morning I early get up-1s,p and food
This morning I got up early. And having

ke-sha, 'dzaa-ta.
cook-sm eat-1s,p
cooked food, I ate.

The last sentence of Text 2 provides a temporal synopsis which specifies the period covered by the report, namely mulaakti 'today.'

11. lo mulaakti go.
O.K. today I
O.K., that's me today.

Between the initial and final temporal specifications, the backbone consists of a string of temporal sequence markers. Each paragraph in Text 2 is introduced by the word mekele 'then.'[6]

The backbone of the event-focused report, the third reportive sub-type, consists of a chain of events. It is usually introduced by a statement which identifies the major eventive topic to be developed within the event chain. This may be illustrated by the initial sentence of Text 3.

1. phullu 'thish-sha, yi-sha nga min, kroyk-tu roongu-m.
   stones fall-sm come-sm and then hit-3s,p rock-ag
   Stones fell down a steep embankment and hit me.

This sentence identifies the central event which answers the question of how the man injured his leg. Text 3 develops this topic from that point on by means of a chronological sequence of events which begins before the event of Sentence 1 and which ends at a point which follows the event in Sentence 1.

Focal content. A monologue may be volunteered or elicited; a monologue may constitute an utterance or a response. The distinction may be observed without ignoring the fact that the distinction is rarely clean-cut. An interesting monologue most often will combine elements both of the elicited response and of the volunteered utterance. In an effective monologue the speaker is both reacting to a given speech situation and is doing something in response to that situation which derives from his own initiative. What he says is neither merely response nor is it a completely isolated utterance. Focal content is that part of a monologue which answers most directly to that which provoked or prompted the monologue--and will often contain elements of response as well as elements of utterance.

The mix of elements will differ from situation to situation. An effective vendor in the market may produce monologues that are heavily weighted on the utterance side--taking the initiative in an attempt to sell his goods. An established merchant in Kathmandu, however, typically produces monologues heavily weighted on the response side--the customers come to him with their various demands.

Focal content may thus be viewed as that which most specifically fulfills the need which prompted the monologue. It generally involves a line of tension between a problem, a challenge, a complication, a question, and their respective resolutions. Reportive monologues in Sunwar so far as we have been able to observe them are to a large extent response monologues. They are elicited by potential hearers. They are typically given to an interested audience. In the samples in this paper the informative content of the monologue is focal content. If one were to challenge the speaker as to the point of his report, he could very well respond by pointing out that his audience had asked for it--he was complying with a request to furnish information and that would be point enough.

Text 1 was elicited by asking the language helper, "What did you do yesterday? Tell me about it." The selection of material given in the response, however, answers to the known interests of the questioner within a larger context. In the paragraph which begins with Sentence 5, the language helper reports having seen a site which might be suitable for an air strip, a fact which he knew would be of very special interest to his hearer.

Text 2 is an entry taken from the language helper's diary. The language helper had been asked to keep a diary, and thus Text 2 was clearly elicited and may even have been viewed as pointless from a communicative point of view by the language helper.

Text 3 is taken from an interview by the language helper of a man with an injured leg. The language helper's function as interviewer can be thought of as that of providing a need which certain specific focal content in the response can satisfy. The language helper began by asking the man what happened to his leg. To this the man replied simply, 'The leg got cut.' Pushing further, the language helper asked how it happened. The response to that is recorded in Text 3. In this context it can easily be seen that a large part of Text 3 is focal content--a resolution of the tension raised by the question 'How did it happen?'

Surely among the texts given here the most striking example of focal content as the resolution of tensions perceived by the speaker is to be found in Text 1A. Ten days before Text 1A was elicited, the language helper had been sent to his village, Sabra, with instructions to carry out four specific tasks. After his return he was asked to describe his trip. The eliciting request made no reference to the specific tasks he had been asked to perform. Indeed, what was desired was simply a travel report which might be used as evidence of the nature of such monologue types. Judging from the result, however, the language helper did not perceive this request as a linguistic exercise but rather as a means of resolving the tension created by the earlier instructions he had received concerning the four tasks he was to perform. In any event, task 1 (take Erika and Monika to Sabra) is reported on in sentences 1 through 9; task 2 (take the girls to a Kagate village) is dealt with in Sentences 10 through 29 and 33 through 51; task 3 (look for a possible location for an air strip) is accounted for in Sentences 30 through 32; and task 4 (bring back news about the health of grandfather) is reported in Sentences 52 through 54. Text 1A contains very little that could not be accounted for as answering to tensions arising out of the instructions given ten days before.

Tributary material. If focal content responds to the primary tension, problem, or complication of the speech act, tributary material is a response to the perceived lacunae in the hearer's background information. Tributary material in the reportive texts presented here is limited to rather low-level information about setting as, for example, the temporal and locative elements of Text 3.

2. The Processive Development Type

The processive development type develops a topic which involves habitual activities such as work processes, ceremonies, and festivals which are carried out repeatedly in very much the same way. The processive development may function either as a direct informative speech act or as a direct hortative act. Within a direct informative act, these activities are described in projected time and in either first or third person, depending on the extent to which the speaker wishes to identify himself with the activity he is describing. Within a direct hortative act, the hearer is exhorted to carry out the prescribed activities in a certain manner, and for this purpose the impersonal imperative forms are used for backbone verbs.

Backbone. The backbone of the processive development type consists of a chain of steps. This chain of steps is identified by the co-occurrence of two markers in the intial sentence of the chain. The first sentence of Text 4 provides an example of this.

1. siibi ke-ka-nu, dopa key-niki deensha hana?
beans cook-1pl-sim how cook-1pl,np het.qu
When we cook beans, how do we cook them?

'ngoynti pedz masnu pa kyor-niki.
first onions small do cut-1pl,np
First we cut the onions into small pieces.

The combination of the simultaneous marker *-nu* 'while' and the question word *dopa* 'how' is what identifies this sentence as the beginning of a chain of processive steps. So far as we have been able to determine, this combination of markers is unique to the processive development. The first step in the chain of processive steps is marked by *ngoynti* 'first' and the following steps are marked by *mekele* 'next.'

Focal content. The processive developments that we have been able to observe were mostly response monologues which were elicited by asking the speaker to describe a given procedure which he and his society were accustomed to carrying out. Such a speech act is natural and functional on the assumption that the hearer is a person not acquainted with the procedure under discussion. Each of the texts given here was elicited from a member of Sunwar society by an outsider, thus all the examples given are response monologues. Text 4 was elicited by the question, 'How do Sunwars cook beans?'; Text 6 with the question, 'How should one cook beans?'; Text 5 with the question, 'How do you plant rice?' The questions are answered in terms of a series of steps. These steps respond directly to that which elicited the speech act and thus constitute focal content.

The question used to elicit Text 6, 'How should one cook beans?' presents the speaker with a two-fold challenge. Not only is he expected to give a procedure for cooking beans--he is also to assure the hearer that the procedure given is the proper one and that it will produce good results. The evaluation in Sentence 9 of Text 6 provides this assurance and thus forms a part of the focal content.

9. minu siibi brook-b.
and beans be tasty-st,np
And the beans will be tasty.

Tributary material. The processive developments that we have observed have tended to have relatively little tributary material. Sentences 5 and 6 of Text 5 constitute an example of tributary material.

5. bush bur 'taak-t hana, eker 'naakdo bwaakku laye-tsa
white rice be-itp there night water drain-auxR
If it is white rice, the field must be irrigated during

'malba. 6. aaga kyer bur 'baak-t hana, bwaakku laye-tsa
imp2 in black rice be-itp water drain-auxR
the night. If it is black rice, the field must not be

ma-'malb.
neg-imp2
irrigated.

This tributary material serves to inform the hearer that there are two kinds of rice, and that, depending upon the kind of rice to be planted, an additional step in the procedure may or may not be required.

3. The Expositive Development Type

The expositive development type contrasts with other development types in its non-chronological approach to a topic. The verbs of its backbone are not restricted to any given tense or person.

Backbone. The backbone of the expositive development type consists of a chain of points related to a given conceptual area. This type is illustrated in Text 7. The main point of the text is a hortatory one: 'Take good care of the animals.' The backbone may be viewed as consisting of four points relating to the main point as follows: 1) Don't sit around! Take care of yourself! (2-5); 2) Be careful when you get grass! Feed the animals properly! (6-9); 3) Be careful when you lead the animals to the watering place! (10-11); 4) Take good care of the young animals! (14-15).

Focal content. Expositive monologues of the sort exemplified in Text 7 are not normally elicited. They are typically initiated by the speaker in response to a situation rather than in response to a question. A sincere question will usually guarantee the speaker an audience. Elicited monologues thus typically demand less of a speaker in terms of efforts to gain and hold an audience than volunteered monologues. Elements of a monologue which function to gain and hold an audience by pointing to a need which the speech act proposes to satisfy are here viewed as focal content. This kind of focal content is more likely to be expected in non-elicited monologues than in elicited monologues. Such elements may be either verbal or non-verbal. The vocative elements in Text 7 appear to have a function as focal content in this way.

The hortatory points in Text 7 also function as focal content. They create a tension which is resolved later in a largely non-verbal response--that of caring for the animals. Hortatory speech acts may be characterized in general as having focal content which is largely unresolved within the bounds of the monologue.

Tributary material. Sentences 12 and 13 constitute tributary material in Text 7. They provide background information which gives reasons for, and underlines the importance of, the main hortatory points of the monologue.

12. bastu rim-sho pa ma-koo-sha hana, san taw, 'te-
animals well-adv do neg-look-sm itp my son where-
If you do not take good care of the animals, my son,

nga mool dum-ba.
from fertilizer become-3s,np
where will the fertilizer come from?

13. mool ma-'baak-t
fertilizer neg-stay-itp
Without fertilizer, the

hana, baari-m makay 'tsiri ma-dum-ba.
field-L corn millet neg-become-st,np
corn and millet will not grow in the field.

4. The Narrative Development Type

The topic of a narrative development type involves a chain of events in which the speaker was not personally involved. The subjects of backbone verbs are in the third person, and backbone verbs themselves are in past tense 2, a tense which dissociates the speaker from personal participation in the action. The narrative development type is distinguished from all other types in its occurrence as the illustrative portion of an indirect discourse. Apparently no other type can occur in this function.

The first part of a fable can only be a narrative. The narrative portion of a fable is distinguished from the non-narrative moral by a difference in tense. Texts 9 through 11 exemplify the narrative development type.

Backbone. The narrative development type may have either one of two different kinds of backbones: a backbone which consists of a chain of events, of which Texts 10 through 11 are examples; or a backbone which consists of a chain of episodes related to the central participants, of which Texts 8 and 9 are examples. Two subtypes of narrative are distinguished on the basis of this difference in backbone structure: the former we have termed the event-focussed narrative and the latter, the participant-focussed narrative. Event-focussed backbones are characterized by clause chaining across paragraph boundaries. Chaining of this sort is lacking in participant-focussed narratives. In participant-focussed narratives we find that the cast is rearranged within the spotlight at paragraph boundaries. Typically the spotlight shifts from one participant to another at paragraph boundaries. For further discussion of the characteristics of these two narrative subtypes, see Schulze and Bieri, Chaining and spotlighting, elsewhere in this part.

Focal content. Narrative monologues typically serve as vehicles of entertainment or information. Texts 8 and 9 are typical narratives in this respect. In indirect discourse, a narrative may stand in double function. It may serve to entertain all by itself, while at the same time providing an illustration of some point which is generally presented in the form of a moral at the end. Texts 10 and 11 are illustrations of this use of the narrative monologue.

The four examples of narrative monologue given here were elicited in such a way as to make it impossible to guarantee the presence of specific focal content in terms of an external situation or context. The language helper was simply asked to tell a story. He was then free to determine what he wished to accomplish. The speech act was elicited; consequently he was guaranteed an audience. A good story-teller, however, will provide focal content of his own, and Text 11 can be taken as exemplifying such supplied focal content. In a narrative, supplied content will typically have two parts: a complication or series of complications and a resolution or series of resolutions. In Text 11, the initial paragraph presents a complication: a baby is born to a couple who had a pet rat. One might expect the rat to become jealous of the new-born rival for his keeper's affection. The complication is further developed when as a result of various circumstances the baby is left alone in the house with the rat and a snake arrives on the scene with an obvious culinary interest in the baby. Having developed such a situation, the story-teller has built up tension or suspense sufficient to hold an audience. He has developed a problem situation which requires a resolution. The audience had a reason to listen and will be able to recognize the resolution when it comes. In this case the resolution itself constitutes a further complication: the rat kills the snake and, still bloody from the encounter, goes to meet the child's mother. The blood is ambiguous and the reluctance of father and mother to leave the child alone with the rat betrays a basic distrust of which the rat is apparently unaware. The resolution of the second complication proves to be a mistake. The mother, misinterpreting the situation, kills the rat, only to discover upon returning home that it was the rat who had rescued the child from the evil designs of the snake. Such a bad ending invites the moral with which the monologue ends. Internally the sequence of complication and resolution which we view as focal content is relatively clear. What, if anything, the language helper had in mind in terms of focal content for the indirect hortation as a whole is not clear.

Tributary material. There is almost always some material in a narrative monologue which may be identified as tributary. Introductory setting elements which take the hearer from the performative "here and now, I and thou" to the narrative frame of "then, there" and participant identification are tributary in nature and are rarely omitted. This kind of tributary material, occurring early in the monologue, will often set the scene for the narrative as a whole. In addition to this, each scene or episode of the narrative may require a certain amount of tributary information regarding time, place, and cast if the episode is to form an intelligible part of the narrative as a whole. The first four sentence of Text 11 constitute a good example of a narrative setting.

1. 'say baman-kaa nu baman-i-kaa 'baak-sa 'baakt.
once Brahmin-one and Brahmin-f-one live-3d, pp
Once there lived a Brahmin and his wife.

2. minu nga mina meko baman nu baman-i-mi theeb yits-kaa
and and then that Brahmin and Brahmin-f-ag big rat-one
That Brahmin and his wife were feeding a big rat.

thul-sho 'baak-sa 'baakt.
feed-st stay-3d pp

3. minu thul-se, thul-se, meko
and feed-3d feed-3d that
While being fed, the rat

yitsu-mi yo loo 'rup-b dum-maakt.
rat-ag also talk understand-N become-3s,pp
learned to understand man's language.

4. minu 'mar
and what
Then what

'pam-se 'baakt-ne deensha hana
do-3d pp-ri rhet.qu
happened?

kaabu-da meko as-ke rikle
one day-el that their-of small
One day a baby was born to them.

'nak	thi-sho	al-kaa	'baak-maakt-ne.
new	born-adj	child-one	stay-3s,pp-ri

One formal feature which corroborates the identification of this section as tributary is the inherently stative verbs involved such as dum-maakt 'become' or 'baak-maakt 'was, stayed.'

B. Paragraph Development Types

We have noted above that backbone and focal content often tend to be more like simultaneous structurings of a given speech act than like mutually exclusive constituents of the speech act. In certain instances, a given clause may even function simultaneously as backbone and as focal content. This is a defining characteristic of direct speech acts. We have also indicated that various simple monologue types in Sunwar can be distinguished from one another on the basis of the various characteristics of their backbones.

In this section we investigate the kinds of paragraph structures into which monologues are typically segmented. For each monologue type there is a paragraph type which may be considered nuclear to the monologue. Thus we will speak of reportive paragraphs, processive paragraphs, expositive paragraphs, and narrative paragraphs. The coherence of any monologue as a whole depends crucially upon the structure of its nuclear paragraphs and the relationships that obtain between them. For this reason we will refer to the paragraphs which are nuclear to a given monologue type as its backbone paragraphs. The group of paragraph types which may function as backbone paragraphs is considered in Section 1 below.

Bundling of focal content is a diagnostic feature of indirect speech acts. We will refer to the group of paragraph types in which focal content may be bundled as focal content paragraphs. Focal content paragraphs are discussed in Section 2 below.

Paragraphs in a monologue which are neither backbone paragraphs nor focal content paragraphs will be referred to as tributary material paragraphs. The group of paragraph types which function as tributary paragraphs is considered in Section 3 below.

In each section we will consider 1) the diagnositc features of the group: what must be true of a paragraph type if it is to qualify as a member of the group, 2) what paragraph types belong to the group, and 3) how backbone material is distinguished from tributary material for each paragraph type in terms of the internal structure of the paragraph itself.

1. Backbone Paragraphs

To qualify as a backbone paragraph, a paragraph must develop the same topic and draw from the same set of person and tense markers as the backbone of the monologue in which it occurs. Sentences 14 through 16 of Text 11 may be taken as an example of a backbone paragraph.

14. oo-maakta, minu meen bela busu-mi al 'bwa-tsa-kali
enter-3s,pp and that time snake-ag child eat-auxR-pu
After having entered, the snake was determined to eat

thik dum-maakt. 15. minu-da, "meko theeb yitsu-mi al
ready become-3s,pp and-el that big rat-ag child
the child. The big rat, saying to herself, "The

'bwa 'tsap-tu," dee nga mina, dor-sha, pi-sha meko bus-kali
eat can-3s,p say and then run-sm come-sm that snake-ben
snake will eat the child," came running and bit the snake into

tin tunka 'sel-a 'baakt. 16. minu 'sad-a 'baakta, 'noole
three piece make-3s pp and kill-3s pp after
three pieces. With a mouth still bloody from

a shoo 'nelle hushe kur-sha nga mina, "'mul aan tahni
his mouth all blood carry-sm and then now my dear
having killed the snake the rat said, "Now I will show myself to

baman-i-kali 'koyn-nu-nga," dee nga mina, la-maakt.
Brahman-f-ben show-ls-opt say and then go-3s,pp
my beloved master's wife," and she left.

By comparing the paragraph given above with the rest of Text 11, it can be seen that this paragraph meets the requirements of a backbone paragraph within Text 11. This paragraph continues the chain of events as a single episode in the chain. Its backbone verbs are all third person, past 2, as are the backbone verbs of the remainder of the monologue. This paragraph is thus an example of a backbone paragraph in a narrative monologue, or simply, a backbone narrative paragraph.

The following example from Text 1 is a reportive paragraph. It develops the same personal experience as is developed in the remainder of the monologue, involving a personal experience, and has backbone verbs in first person of past 1.

10. minu meen mere pa 'pi-sha nga mina, oonth taanra
and this there do come-sm and then this side top
And coming from there I arrived at the top of the hill

dzaak-ti. 11. oonth taanra dzaak-nga-nu, meen luukdz
arrive-ls,p this side top arrive-ls-sim that down
on this side. When (I) arrived at the top there were some

gothla-puki 'baak-teekm. 12. baat pa nga mina, 'noole prup-sha
herdsman-pl stay-3pl,p talk do and then after go down-sm
herdsmen down below. Having talked to them, having gone

nga min, dzaakmane taanra dzaak-sha, siim koo-sha, meen luukdz
and then Dzaakmane top arrive-sm plain look-sm that down
lower down, having arrived at Dzaakmane top, and looked at

pa prup-ti.
do go down-ls,p
another flat spot, I went down.

The following example, taken from Text 4, is a processive paragraph. It fits the backbone of the whole monologue as one step in the overall procedure. Its finite verbs are in first person, projected time, agreeing with the finite verbs of the rest of the monologue backbone.

2. mekele siibi mur-niki. 3. minu siibi a kosh-le
next beans wash-lpl,np and beans its ends-from
Next we wash the beans. And we peel off the ends of

khe-niki. 4. minu karay kaa-sha, 'itska tel luuk-niki.
peel-lpl,np and pot heat-sm little oil pour-lpl,np
the beans And having heated the pot, we add a little oil.

5. minu pedz sup-sha, tsinka kiik 'payk-niki.
and onions add-sm moment burn cause-lpl,np
And having added the onions, we fry them for a moment.

6. minu siibi sup-sha, 'itska wal-niki.
and beans add-sm little fry-lpl,np
And having added the beans, we fry (the beans and the onions) a little.

The following example, taken from Text 7, is an expositive paragraph. It fits the backbone of the whole monologue as the many hortations related to the topic of personal conduct while caring for the family livestock. Its finite verbs are imperative, agreeing with those of the remainder of the monologue backbone.

2. gyar-sha, ma-'baakk-o. 3. heenthe roongu ma-law-o.
play-sm neg-stay-impl steep rock neg-go-impl
Do not sit around playing! Do not go to the cliff!

4. rawa 'ngoyk-se-nu, koo-sha, 'ngoyks-o. 5. phash
tree climb-2s-sim look-sm climb-impl storm
Look out first before you climb trees! Do not

'paw-a-nu, rawa ma-'ngoyks-o.
do-3s-sim tree neg-climb-impl
climb trees when it is stormy!

The following example, taken from Text 8, is a narrative paragraph. It fits the backbone of the whole as an episode focussed upon a central character in a chain of episodes which contrasts two such characters. Its finite verbs are third person, past 2, agreeing with the finite backbone verbs of the remainder of the monologue.

15. mekele meko byaph she 'lee-th gaak-maakt meko laata.
then that ox meat sell-pu go-3s,pp that mute
The mute now went to sell the meat of the ox.

16. minu " khassi a she 'gyap-nini de ma-'gyap-nini, khassi
and goat its meat buy-2pl,qu or neg-buy-2pl,qu goat
And he went saying: "Will you buy goat meat, or will you

a she 'gyap-nini koon, " de-n de-n gaak-maakta.
its meat buy-2pl,qu perhaps say-c say-c go-3s,pp
not buy? (I think) perhaps you would."

17. 'noole thaylo-kaa kyet tsaakg-a 'baakt.
after bag-one money bring home-3s pp
After that he brought home a bag of money.

In addition to topical congruence with the remainder of the monologue and finite agreement among backbone verbs, one other device is used to mark a paragraph as belonging to the backbone of the monologue, namely that of paragraph-initial tagging. There are two kinds of paragraph-initial tagging: 1) spotlighting, in which a time, a location, or a participant is brought into focus, and 2) chaining, in which the event sequence itself is made prominent.

Either kind of paragraph-initial tag is possible within a travel report. The second paragraph of Text 1 is a reportive paragraph which illustrates spotlighting of location.

3. minu nga mina khaping aydi gawn aykta gawn
and and then Khaping lower village upper village
I stayed there, walking around the upper and lower

'hir-sha nga mina, 'baak-ti. 4. mekele pa pi-nga-nu, warts
walk-sm and then stay-1s,p that do dome-1s-sim friend
village. After having done that my

ma-'baa pheri.
neg-stay again
friend still had not come.

The last paragraph of Text 1 illustrates chaining across paragraph boundaries as a paragraph-initial tag.

14. baat pa 'baak-sh liik-sha nga mina, 'noole yi-ti.
talk do stay-sm finish-sm and then after come down-1s,p
Having stayed for a talk, I came down.

15. yi-sha, eko khiin dzaak-sha nga mina, ama
come down-sm this house arrive-sm and then another
After coming down and arriving at this house and after

baabu khame ke-sha nga mina, 'baak-sho 'baak-taakse.
father food cook-sm and then stay-st stay-3d,p
mother and father cooked the food, they stayed there.

16. minu 'dza-sho.
and eat-pi
And (we) ate.

17. minu baat pa nga mina, 'ip-tak.
and talk do and then sleep-1pl,p
And having talked, we slept.

The backbone paragraphs of a diary report may be tagged initially by spotlighting a temporal expression. This is exemplified by the initial paragraph of Text 2.

1. 'muI suni go sunikana 'book-ti.
now morning I early get up-1s,p
This morning I got up early.

2. minu khame ke-sha, 'dzaak-ta.
and food cook-sm eat-1s,p
And having cooked food, I ate.

The word mekele 'and then' provides an initial temporal tag for each succeeding paragraph of Text 2.

The backbone paragraphs of participant-focussed narratives are tagged initially by spotlighting participants. Indeed, in this monologue type, paragraph boundaries may be identified largely by the shifting of the spotlight from participant to participant in the cast. This pattern can be quite clearly seen in Texts 8 and 9 in which each paragraph has an initial tag of this sort.

The backbone paragraphs of event-focussed narratives are tagged by chaining across paragraph boundaries. A backbone paragraph within this type of narrative is identified as such by its chaining clauses, its topical fit, and its selection of person and tense markers for its backbone verbs. Texts 10 and 11 contain examples of this type of paragraph.

Thus far we have discussed the various criteria for the identification of backbone paragraphs and have listed the paragraph types which we have found functioning as backbone paragraphs. We pass now to a consideration of how the backbone of a given backbone paragraph is distinguished from the tributary material within the paragraph. In general, the material which departs from the main development of the topic within the paragraph in such a way as to warrant classifying it as tributary material from the point of view of its content is also formally distinct from the main development of the paragraph in terms of the person and tense markers of its finite verbs.

Sentences 6 through 8 of Text 2 form a reportive backbone paragraph. Within this paragraph, Sentences 6 and 7 have finite verbs which are third person plural in contrast to the first person singular marking of the backbone. Sentences 6 and 7 also constitute tributary material from the point of view of content.

6. mekele sahar tayping iskul la-nga-nu, laan-m thampa
then town typing school go-1s-sim road-L many
As I was going to the typing school in town, many police-

pulis-puki 'baak-teekme.
police-pl stay-3pl,p
men were on the road.

7. minu meko-puki-m laak-tsa
and these-pl-ag go-inf
They did not allow me to go

ma-ge-yi-mi.
neg-give-1s,und-3pl,ag
through.

8. minu go 'hir-sha nga mina,
and I go around-sm and then
And having gone around, I

tayping iskul dzaak-dit-ti.
typing school arrive-Lr-1s,p
arrived at the typing school.

Sentences 6 through 9 of Text 7 constitute an expositive backbone paragraph. From the point of view of content, sentence 6 is tributary. It provides a setting. From the point of view of formal marking, the finite verb of Sentence 6 is third person plural, indicative, projected time, in contrast to the imperative marking which is normal within the backbone of Text 7.

6. minu aan taw, mesh bastu roongu la-sha, 'thit-nimi.
and my son animals rock go-sm fall-3pl,np
And, my son, if the animals go near the cliff, they will fall.

7. rim-sho pa gothla 'paa-mi.
well-adv do herdsman do-und,pl
Be a good herdsman to them!

8. kaahs di-th la-sho-nu,
grass get-pu go-imp2-sim
Watch the cliff when you

roongu koo-sha 'riik-tsa.
rock look-sm cut-imp3
cut grass!

9. ir-le phullu 'thish-sha
from-there stones fall-sm
Stones often fall from

'yiy-ba.
come down-st
there.

Sentences 11 through 15 of text 9 constitute a narrative backbone paragraph. With respect to its content, Sentence 12 is tributary. It provides background information that explains why the cat was able to escape from the leopard. The main verb is the inherently stative copula 'baak-maakt 'was.' Even though the choice of tense and person are what would be expected of a backbone sentence, the choice of the copular verb is sufficient to mark the main clause as stative.

11. minu dzoy nu biralo rawa-kaa-m 'ngoyk-sasa 'baakt.
and leopard and cat tree-one-L climb-3d pp
Then the leopard and the cat were climbing the same tree.

12. minu 'nak 'nak rawa 'ngoyk-b 'baak-maakt. 13. meko bela
and new new tree climb-N be-3s,pp that time
(The leopard) was still learning to climb. Just then

dzoy rawa 'ngoyk-n 'ngoyk-n 'baak-me-nu, biralo la-sha, a
leopard tree climb-c climb-c be-3s-sim cat go-sm its
while the leopard was climbing, the cat came and bit off the

nangra ditish kroysh-sha, dzoy-kali karam tsiram 'tookg-a
claws noise bite-sm leopard-ben noise make fall-3s
leopard's claws causing him to fall from the tree.

'baakt-ne rawa luukdzu-le. 14. minu dzoy
pp-ri tree downward-from and leopard
And having

'dook-sh liik-sha nga mina, gurur pa biralo kheda pa dor-maakt.
fall-sm finish-sm and then noise do cat follow do run-3s,pp
fallen, he ran after the cat.

15. minu biralo tsihiin rawa 'ngoyk-sha, broyn-maakt.
and cat however tree climb-sm live-3s,pp
The cat, however, saved its life by climbing a tree.

The following paragraph is a narrative backbone paragraph taken from a text which was too long to include in the appendix of this paper. Sentence 5 is an example of a tributary sentence which is marked as tributary by the stativization of the main verb. The verb form which occurs is dzaak-sho 'baak-maakt 'had arrived.' This stative form stands in contrast to the corresponding eventive form, dzaak-maakt 'arrived.'

4. minu khalpi-m " go aru 'ta-sha ma-'hiin-nu
and old lady-ag I other see-sm neg-fear-ls,np
And the old lady said, "I don't fear anything, my child.

aan tsats. eko tsingtsing 'ta-sha, 'hiin-nu." deen-maakt.
my child this darkness see-sm fear-ls,np say-3s,pp
I am only afraid of this darkness."

5. minu meko bela khassi bwa-tsa kali dzoy-kaa dzaak-sho
and that time goat eat-I pu leopard-one arrive-st
By that time a leopard had arrived to eat the goat.

'baak-maakt. 6. minu mo deen-sho meko dzoya-mi neen-a
be-3s,pp and so say-adj that leopard-ag hear-3s
And the leopard heard what was said.

'baakt.
pp

Although backbone paragraphs typically do contain tributary material, it is not at all obligatory that they do. Text 4, Sentences 2 through 6 is an example of a processive backbone paragraph which lacks tributary material. All the sentences of this paragraph conform both in content and in formal markings to the norm for the processive backbone.

2. mekele siibi mur-niki. 3. minu siibi a kosh-le
next beans wash-1pl,np and beans its ends-from
Next we wash the beans. And we peel off the ends of

khe-niki. 4. minu karay kaa-sha, itska tel luuk-niki.
peel-1pl,np and pot heat-sm little oil pour-1pl,np
the beans. And having heated the pot, we add a little oil.

5. minu pedz sup-sha, tsinka kiik 'payk-niki.
and onions add-sm moment burn cause-1pl,np
And having added the onions, we fry them for a moment.

6. minu siibi sup-sha, 'itska wal-niki.
and beans add-sm little fry-1pl,np
And having added the beans, we fry (the beans and the onions) a little.

2. Focal Content Paragraphs

To qualify as a focal content paragraph in a given development type from a formal point of view, a paragraph must occur immediately following a narrative development and it must distinguish itself from the backbone paragraphs of the preceding development by differences in mood, tense, person, or stative characteristics. To qualify as a focal content paragraph in terms of its content, the paragraph should summarize the development which precedes it, or at least refer to that development in a way that involves the hearer either implicitly or explicitly in its consequences.

Sentences 12 and 13 of Text 10 can be taken as an example of a focal content paragraph within an indirect hortatory speech act. It occurs following an event-focussed narrative development type. The finite verbs of the focal content paragraph stand in contrast to those of the preceding development. Sentence 12 has an imperative verb in contrast to the indicative of the preceding development. Sentence 13 has a stativized non-past tense verb in contrast to the eventive past tense 2 verbs of the preceding development. With respect to content, Sentences 12 and 13 summarize the preceding development as an example of greed and involve the hearer by warning him against following this example. In particular, the transitional word mo-pa-tike 'therefore' (literally: so doing) is used to signal the fact that the speaker is about to address the hearer directly, taking the foregoing narrative as an illustration in an indirect hortation. The imperative of Sentence 12 provides a formal indication of the hortatory character of the paragraph.

12. minu mo-pa-tike muru-mi "kyet 'shush tulep-tu."
and so-do-N man-ag money much gather-3s,p
And therefore men say: "The one who makes a lot of

dee nga mina, "ann 'shush banep-tu." dee nga mina, genayo
say and then corn much make-3s,p say and then never
money or the one who has a lot of corn must never be greedy."

ma-aantee-tsa. 13. minu aantee-si-ya-nu ma-dum-b.
neg-greedy-imp3 and greedy-re-3s-sim neg-become-st,np
Being greedy is not good.

We distinguish two types of paragraphs which function as focal content paragraphs: a comparative type and an applicative type. The two are distinguished on the basis of their internal structures. The comparative type compares two items; the applicative type draws an explicit lesson from a preceding narrative.

The comparative type draws attention to the similarities or the differences that exist between two items. This may be done by the use of antonymous pairs such as young, old; poor, rich. This kind of comparison is exemplified in Sentences 34 through 37 of Text 8.

34. minu 'noole a dagyu tham prung dum-maakta.
and after his elder brother very poor become-3s,pp
After (these events) the elder brother got very poor.

35. meko a pahy laata 'thampa kyet thiy-b
that his younger brother mute very much money touch-N
His younger brother the mute, having made so much money,

mur dum-sha nga mina, 'baak-maakta. 36. minu nga mina 'noole
man become-sm and then stay-3s,pp and and then after
stayed very rich. Later on the mute

tehrey 'shush tahni dum-maakt meko laata. 37. a
very very rich become-3s,pp that mute his
became enormously rich. His elder

dagyu tsihiin puyn-sha, 'dzay-b mur dum-maakt.
elder brother however beg-sm eat-N man become-3s,pp
brother, however, became a beggar.

Comparison can also be accomplished by contrasting negatives with affirmatives. This kind of comparison is exemplified in the following paragraph, taken from a text not included in the appendix.

12. minu dupoh genayo ma-'beek-ba.   13. khad genayo
and lawn never neg-die-st,np   crow never
The lawn never dies.   The crow never

ma-'beek-ba.   14. mur tsihiin 'beek-tsa deek-sho.
neg-die-st,np   man however die-imp3 force-pi
dies.   Mankind, however, is forced to die.

In both of these examples it may be observed that the marker tsihiin 'however' is used to underline the contrast which is being called to the hearer's attention.

The applicative type draws a lesson from a narrative illustration. In doing this, use is made of referential devices which relate to the illustration, to the hearer, or to both. Devices which are commonly used to link applicative material to the illustration include person and tense markings identical to those used in the illustration and the morpheme mo- 'so, thus, as we have seen' in the word mo-pa-tike 'therefore.' Devices which are commonly used to link applicative material to the hearer include imperatives and the sequence -pa-tike 'doing' in the word mo-pa-tike. Stativized material in the indicative mood often provides a two way link, relating the applicative material both to the illustration and to the hearer.

The following example of an applicative paragraph comes at the end of an indirect hortative text which has not been included in the appendix. The illustration depicts two men walking in a forest and coming upon a bag of money. After a hot dispute as to who saw the bag first and who should thus be allowed to take it, the original owner arrives on the scene, calls the police, and has the two men arrested. Since both men had originally claimed the money, both were thrown in jail. The moral of the story is that those who would share another's fortune must also share his fate. We include below the end of the final paragraph of the illustration and the applicative paragraph that follows it. Solidly underlined material relates the illustration to the application. Material with broken underlining relates the application to the hearer. Material that is not underlined has a function in both directions.

14. minu meko as-kali 'nimpha-kali 'gyaysh-sha nga mina,
and that they-ben both-ben catch-sm and then
And having caught the two they took them and locked

laysh-sha, 'tsookg-me 'baakt.
take-sm close in-3pl pp
them up.

15. mo-pa-tike gena hana yo mur nu laa 'yook-sha,
so-do-N when if also men with only share-sm
Therefore, at all times both must be shared.

'dza-tsa 'malb. 16. 'mar kura 'baak-t hana yo 'shush
eat-auxR imp2 what thing be-p itp also very
Whatever is done, it must be done correctly.

rim-sho pa nga mina, 'pa-tsa 'malb. 17. minu laa rim-sho
good-adj go and then do-auxR imp2 and only good-adj
Only that is good

dum-ba. 18. minu meko 'niikshi as-kali
become-st,np and that two they-ben
(to do things correctly). And having taken those two (men),

laysh-sha nga mina, dzehl-kaa-da 'tsookg-me 'baakt.
take-sm and then jail-one-el close in-3pl pp
they imprisoned them both.

Within a focal content paragraph there is a distinction between backbone material and tributary material. The background to which tributary material in a focal content paragraph refers is generally restricted to the illustration which immediately precedes it. For this reason, material which is tributary to a focal content paragraph generally has the person-tense-mood markings of the narrative backbone. By contrast, sentences which are comparative, stative, or imperative usually form part of the backbone of the focal content paragraph. This distinction can be seen in the preceding example.

Not all focal content paragraphs have tributary material. Sentences 34 through 37 of Text 8 constitute a focal content paragraph which consists entirely of backbone material. All of its finite verbal expressions involve inherently stative verbs such as dum-maakta 'become' or 'baak-maakta 'stayed, was' and thus contrast with the normal narrative pattern.

3. Tributary Material Paragraphs

To qualify as a tributary material paragraph in a given development type from a formal point of view, a paragraph must occur in monologue-initial or monologue-medial position and must have backbone markings which distinguish it from the backbone of its including monologue. To qualify with respect to content, such a paragraph must enlarge upon background relevant to the including monologue.

Sentence 5 and 6 of Text 5 may be taken as an example of a tributary material paragraph. As regards its formal features, this paragraph occurs between processive backbone paragraphs. It has imperative type finite verbs rather than verbs in third person projected time as do the verbs of the processive monologue backbone. As regards its content, Sentences 5 and 6 enlarge upon the fact that the kind of rice one has determines whether one irrigates or not.

5. bush bur 'baak-t hana, eker 'naakdo bwaakku laye-tsa
white rice be-p itp there night water drain-auxR
If it is white rice, the field must be irrigated during

'mal-ba. 6. aaga kyer bur 'baak-t hana, bwaakku laye-tsa
imp2 in black rice be-p itp water drain-auxR
the night. If it is black rice, the field must not be

ma-'malb.
neg-imp2
irrigated.

Three types of tributary material paragraphs may be distinguished on the basis of internal structure: an enumerative type, a topicative type, and a stipulative type.

The enumerative type requires a listing of elements which constitute the setting or background of the monologue. Such a listing typically includes the identification of participants, temporal and local settings, recountings of previous events required for an understanding of the situation with which the monologue is concerned. The enumerative type makes use of the stativized past form.

Sentences 1 through 4 of Text 11 may be taken as an example of the enumerative type of tributary material paragraph. The finite verb phrases of this example are stativized by the use of the inherently stative verbs, 'baak-tsa 'to be, stay' and dum-tsa 'to become.' The paragraph enumerates the participants which will play the primary roles in Text 11: a couple, a rat, and a child. It indicates what relationships obtain among the leading members of the cast.

1. 'say baman-kaa nu baman-i-kaa 'baak-sa 'baakt.
once Brahman-one and Brahman-f-one live-3d pp
Once there lived a Brahman and his wife.

2. minu nga mina meko baman nu baman-i-mi theeb yits-kaa
and and then that Brahman and Brahman-f-ag big rat-one
That Brahman and his wife were feeding a big rat.

thul-sho 'baak-sa 'baakt. 3. minu thul-se, thul-se, meko
feed-st stay-3d pp and feed-3d feed-3d that
Having been fed, the rat learned

yitsu-mi yo loo 'rup-b dum-maakt. 4. minu 'mar
rat-ag also talk understand-N become-3s,pp and what
to understand man's language. Then what

'pam-se 'baakt-ne deensha hana, kaabu-da meko as-ke rikle
do-3d pp-ri rhet.qu one day-el that they-of small
happened? One day a baby was born to

'nak thi-sho al-kaa 'baak-maakt-ne.
new born-adj child-one stay-3s,pp-ri
them.

The topicative type consists of an action and a description. The action is an action of observation and is marked by verbs such as see, look at, watch, and the like. The description relates to the situation which was observed and is marked by copular and stative verbs. The following is an example of a topicative paragraph:

6. khiin-kaa-mi theeb kyempa-kaa taw-a 'baakt. 7. meko
house-one-L big jar-one see-3s pp that
In a house she saw a big water jar. At

kyempa-mi a puu-mi maana saan koy laa 'baak-sho 'baak-
jar-L its bottom-L pint three some only stay-st be-
the bottom of the jar were only about three pints of water.

maakt-ne bwaakku.
3s,pp-ri water

The stipulative type centers around a contrast between a cause and result sentence and a conditional sentence containing the conditional marker hana 'if...then.' The following paragraph is an example of the stipulative type:

12. 'say gay gopuki ma-pareen-thu nga mina, 'mul shet
long ago we neg-study-neg and then now trouble
Long ago we (lived) without studying, and now we are

'dza-sho. 13. gepuki thampa shet pa nga mina, iskula-m
eat-pi you much trouble do and then school-L
in trouble. Since we have so much trouble, it will be of

pareen-tini hana, 'noole sukh dum-ba.
study-2pl,p ipt after advantage become-st,np
advantage to you later if you study now.

Backbone and tributary material is distinguished in tributary material paragraphs in much the same way as it is in focal content paragraphs. The backbone of the tributary paragraph is marked in a way that contrasts with the backbone of its including monologue. It appears that only the topicative type of tributive material paragraph requires its own tributary material in addition to its own backbone. The enumerative and stipulative types often consist exclusively of backbone material. Text 5, Sentences 5 and 6 constitute a stipulative paragraph which consists exclusively of backbone material.

As indicated above, the topicative type contains both an action and a description. We view the descriptive part as tributary material within the paragraph and it is marked as such by a shift from the narrative-marking characteristics of the action to the stative-marking characteristics of description. This shift can be seen in the following example.

6. khiin-kaa-mi theeb kyempa-kaa taw-a 'baakt. 7. meko
house-one-L big jar-one see-3s pp that
In a house she saw a big water jar. At the

kyempa-mi a puu-mi maana saan koy laa 'baak-sho 'baak-
jar-L its bottom-L pint three some only stay-st be-
bottom of the jar were only about three pints of water.

maakt-ne bwaakku.
3s,pp-ri water

III. THE RELATIONSHIP BETWEEN SPEECH ACTS AND DEVELOPMENT TYPES IN SUNWAR

Only certain strategies are appropriate for the performance of certain speech acts. The relationship between speech act and development type explored here does not involve unique pairings of speech acts with development types, but certain constraints do appear to be in operation. The pairings of speech act and development type which can be demonstrated on the basis of our present corpus are indicated by those cells of Figure 3 which contain references to the texts in the appendix. The parenthesized question marks fill those cells for which we eventually hope to find convincing examples. The blank cells of Figure 3 represent pairings that are excluded on our present hypothesis.

	SPEECH ACTS			
DEVELOPMENT TYPES	Direct Informative	Direct Hortative	Indirect Informative	Indirect Hortative
Reportive	Texts 1,2,3			
Processive	Texts 4, 5	Text 6	(?)	(?)
Expositive	(?)	Text 7	(?)	(?)
Narrative			Texts 8, 9	Texts 10,11

Figure 3. Speech act-development type pairings in Sunwar as exemplified by texts in the appendix.

The restrictions by virtue of which certain pairings of speech acts with development types are excluded appear to be of two kinds, corresponding to the two major categories in terms of which speech acts in Sunwar are defined, namely the distribution of focal content and the mood of focal content.

Consider first the constraints involving the distribution of focal content. In our investigation thus far, we have no indication that narrative development types in Sunwar informative or hortative speech acts allow scattering of focal content. Within the limits of these two types of speech act, only bundled focal content appears to be allowed. If this turns out to be correct, the fact that narrative does not allow scattered focal content in Sunwar might explain the fact that narrative development is incompatible with direct speech acts in Sunwar.[7] Similarly, reportive development types appear not to tolerate bundling of focal content, and this fact may explain the apparent incompatibility of reportive developments with indirect speech acts.

There are also apparent constraints involving mood. Hortative speech acts are compatible only with those development types that allow the use of the imperative as the backbone mood of focal content. Reportive development does not allow this, hence the absence of a hortative-reportive pairing in Figure 3.

Further research involving a wider variety of speech acts and development types will be required to establish the relative generality and usefulness of these hypotheses.

REFERENCES

Austin, J. L. 1965. How to do things with words. Oxford University Press. (William James lectures delivered at Harvard University in 1955.)

Gordon, D. and G. Lakoff. 1971. Conversational postulates. Papers from the 7th regional meeting, Chicago Linguistic Society, 63-84.

Grimes, Joseph. 1972. The thread of discourse. Technical report No. 1, National Science Foundation Grant GS-3180. Cornell University.

Labov, William and Joshua Waletzky. 1967. Narrative analysis: oral versions of personal experience. University of Washington Press.

Lakoff, Robin. 1972. Language in context. Language 48:907-927.

Longacre, Robert E. 1968. Discourse and paragraph structure. Volume 1 of discourse, paragraph, and sentence structure in selected Philippine languages. Summer Institute of Linguistics, Santa Ana, California.

Searle, John R. 1969. Speech acts: an essay in the philosophy of language. Cambridge University Press.

Young, Richard E., Alton L. Becker and Kenneth L. Pike. 1970. Rhetoric: discovery and change. New York, Hartcourt, Brace & World, Inc.

FOOTNOTES

[1] This paper was written as the result of a workshop held in Nepal during the academic year 1971-72 under the project direction of Kenneth L. Pike. The authors wish to express their appreciation to Kenneth L. Pike and to Fran A. Woods for stimulation and encouragement in the initial stages of research. Bieri and Schulze are responsible for the Sunwar material and the analysis thereof. Hale is responsible for the general approach and for the wording of the final draft. We wish to express our deep appreciation to Gyen Singh Sunwar for his work as language helper in connection with this research. Were it not for his skill in acting with words, this paper in all likelihood would never have been written. The research leading to this paper was sponsored in part by the Institute of International Studies, U. S. Department of Health, Education and Welfare under contract No. OEC-0-9-097721-2778 (014).

[2] The Sunwars live in East Nepal, in the Janakpur and Sagarmatha Zones. The dialect studied is spoken in the village of Sabra, situated north of Ramechhap. The Nepal Government Census report lists the number of Sunwar speakers as 13,362. Classificatory information about the language and a sketch of the phonology is found in the introduction to part IV of this volume. For further details on the phonology of the Sunwar language refer to the Phonemic summary, revised version, Tibeto-Burman phonemic summaries IX, and a guide to Sunwar tone, Guide to tone in Nepal series IV, both by Bieri and Schulze.

[3] In English, mood is not the whole answer to the question of speech act marking. There is considerable skewing between superficial mood as marked in individual sentences and the real nature of the speech act. There are rhetorical questions which rebuke and expect no answer (What do you mean by taking my

pencil?). There are imperatives which instruct and do not expect obedience (Add three cups of sugar, stirring briskly ...). There are questions which convey commands (Is the door closed?) and questions which constitute denials (Was I there? Obviously not--so I couldn't have done it.). Such skewing eventually involves linguistic analysis with a study of linguistic context, as is so articulately made plausible in R. Lakoff, 1972 and in Gordon and Lakoff, 1971. Such skewing has not yet been encountered in Sunwar, though eventually we may very well find some.

[4] This is not to claim that a given clause, say, must belong exclusively to backbone or focal content, or even tributary material. The focal content of Text 1A, for example, must clearly be part of the backbone as well. We do assume, however, that where a given stretch of material forms a part of more than one discourse function it will be marked accordingly.

[5] Here we include impersonal imperative within the scope of non-past as well as that which we have specifically labeled non-past. A Processive development type has an imperative backbone in hortative speech acts. See Text 6 for an example of this.

[6] It should be mentioned that *mekele* may be considered a general sequence marker not restricted to a temporal interpretation. It may also have a locative interpretation as, for example, in Text 1A, Sentence 23, or a processive sequential interpretation as in Text 4, Sentence 2.

[7] It is probably not true that narrative in general disallows scattering of focal content. Where the speech act is that of entertaining an audience and the development type chosen is a narrative, focal content will surely be scattered. This constraint may well hold, however, within the limits of the two speech acts described in this paper.

APPENDICES

A. Abbreviations

adj	adjectivizer
adv	adverbializer
ag	agent
auxR	auxiliary relator
ben	benefactor
c	continuous
d	dual

e1	emphasis 1
e2	emphasis 2
e3	emphasis 3
f	feminine
I	instrumental
imp1	imperative 1, or direct imperative
imp2	imperative 2, or obligational imperative
imp3	imperative 3, or general imperative
inf	infinitive
int	interjection as hesitation or exclamation
itp	interdependency marker
L	location
Lr	location remote
N	noun marker
neg	negative
np	non past
opt	optative
p	past tense
pi	past impersonal
pl	plural
pp	past remote
pu	purpose
qu	question
re	reflexive
ri	reported information
rhet.qu	rhetorical question
s	singular
sim	simultaneous events marker
sm	sequence marker
st	stativizer
und	undergoer
1	first person
2	second person
3	third person
'	high tone
, /	clause ending
. //	sentence ending
space ///	paragraph boundary
" "	direct speech

B. Texts

Text 1.

Speech Act: ; Direct informative
Development Type: Reportive (travel)
Situation: Elicited by a question: "What did you do yesterday? Please tell about it!"

1. 'sinaakt go warts grum-th la-ti. 2. minu aan
yesterday I friend meet-pu go-ls,p and my

khiin-le pa nga mina, warts grum-th khaping la-nga-nu, warts
house-from do and then friend meet-pu Khaping go-ls-sim friend

ma-'thid-u.
neg-find-ls,neg

3. minu nga mina khaping aydi gawn aykta gawn
and and then Khaping lower village upper village

'hir-sha nga mina, 'baak-ti. 4. mekele pa pi-nga-nu, warts
walk-sm and then stay-ls,p that do come-ls-sim friend

ma-'baa pheri.
neg-stay again

5. minu meen gyeth pa nga mina, puhsabaari gyeth pa nga
and this upward do and then Puhsabaari upward do and

min, la-ti. 6. minu ir tuuhngaare-mi theeb diim-kaa
then go-ls,p and there Tuuhngaare-L big plain-one

'baak-ta. 7. minu meko hawaydzaadz-nga giran dee koo-sha
be-3s,p and that plane-of ground called look-sm

nga min, 'baak-ti nikay ber. 8. minu 'baak-sha nga min, mekele
and then stay-ls,p very long and stay-sm and then that

pa gyeth pa aykta duy tin ora diim koo-ta. 9. minu
do upward do upper two three pieces plain look-ls,p and

'nellkyenga diim-kaa tsihiin 'itska dum-b khodeesho
most plain-one however little become-st,np like

'baak-t.
be-3s,p

10. minu meen mere pa 'pi-sha nga mina, oonth taanra
and this there do come-sm and then this side top

dzaak-ti. 11. oonth taanra dzaak-nga-nu, meen luukdz
arrive-ls,p this side top arrive-ls-sim that down

gothla-puki 'baak-teekm. 12. baat pa nga mina, 'noole
herdsman-pl stay-3pl,p talk do and then after

prup-sha nga min, dzaakmane taanra dzaak-sha, diim koo-sha,
go down-sm and then Dzaakmane top arrive-sm plain look-sm

meen luukdz pa prup-ti.
that down do go down-ls,p

13. minu kaami khiin dzaak-sha nga mina, kaami
and blacksmith house arrive-sm and then blacksmith

nu bessa baat pa 'baak-ti. 14. baat pa 'baak-sh liik-sha
with much talk do stay-ls,p talk do stay-sm finish-sm

nga mina, 'noole yi-ti.
and then after come down-ls,p

15. yi-sha, eko khiin dzaak-sha nga mina, ama
come down-sm this house arrive-sm and then mother

baabu kkhame ke-sha nga mina, 'baak-sho 'baak-taakse. 16. minu
father food cook-sm and then stay-st stay-3d,p and

'dza-sho. 17. minu baat pa nga mina, 'ip-tak.
eat-pi and talk do and then sleep-lpl,p

18. minu go aan-ke warts grum-th 'la-sho loo ho.
and I my-of friend meet-pu go-st speech is

Free Translation.

1. Yesterday I went to meet a friend. 2. Having left my house, I was going to Khaping but I did not find my friend.

3. I stayed there, walking around the lower and the upper village. 4. After having done that, my friend still had not come.

5. And I went uphill. At the Pushafield I went uphill. 6. At Tuuhngaare was a large flat area. 7. And having looked at that so-called airstrip, I stayed there awhile. 8. And having stayed there for a while I went further uphill and looked at two or three other flat spots. 9. The flattest of these spots, however, is possible for an airstrip as it is.

10. And coming from there I arrived at the top of the hill on this side. 11. On reaching the top, (I saw that) lower down were some herdsmen. 12. After I got there, I talked with them and from there I went to Dzaakmane where I looked at another flat

spot.

13. Having arrived at the blacksmith's house, I stayed for a talk. 14. Having stayed for a talk, I came down.

15. After coming down and after having arrived at this house, mother and father were there and had already cooked the food. 16. And (we) ate. 17. And having talked, we slept.

18. This is my speech about meeting a friend.

Text 1A.

Speech Act: Direct informative
Development Type: Reportive (travel)
Situation: The language helper reports on a survey trip in the Sabra area. He left with instructions to:

1. Help Erika and Monika get settled in our house in Sabra.
2. Take Erika and Monika around in the Kagate villages and introduce them to the people there.
3. Search for a possible airstrip site.
4. Bring back news from the village, especially report on the nealth of grandfather.

1. gopuki ake-le la-sha nga mina, saber 'mar
we here-from go-sm and then a few days ago what

'pa-sho deensha hana, erikha monikha gopuki saan ake-le
do-pi rhet.qu Erika Monika we three here-from

hawaydzaadz-m dziri dzam la-sho.
plane-I Jiri to go-pi

2. mekele meko 'naakdo 'ip-sho. 3. minu asuni
there that night sleep-pi and next morning

'book-sha nga mina, kur-b mur mal-sha, sabra gaak-tsa
get up-sm and then carry-N man search-sm Sabra walk-inf

thale-sho.
begin-pi

4. sabra gaak-tsa thale-sha nga mina, burkhe dzaak-sha
Sabra walk-inf begin-sm and then Burke arrive-sm

nga mina, lamdz 'dza-sho. 5. lamdz 'dza-sh liik-sha nga mina,
and then lunch eat-pi lunch eat-sm finish-sm and then

'noole gaak-sho. 6. minu bithrikhane dzaak-dish-sha, 'ip-sho.
after walk-pi and Bithrikhane arrive-Lr-sm sleep-pi

7. bithrikhane-m bessa giw 'pap-tu. 8. minu bithrikhane
Bithrikhane-L much cold do-3s,p and Bithrikhane

dzaak-dish-sha, 'ip-sha nga mina, suni 'book-sha, sabra
arrive-Lr-sm sleep-sm and then morning get up-sm Sabra

gaak-tsa thale-sho.
walk-inf begin-pi

9. minu suni gaak-sha, naakti sabra dzaak-dish-sha nga
and morning walk-sm noon Sabra arrive-Lr-sm and

mina, 'nell kotha 'nell sapha pa nga mina, meko as-kali rim-sho
then all room all clean do and then these two-ben well-adv

pa woyk-taak-si.
do put-1s-3d,und,p

10. minu adiisa suni 'book-sha nga mina, samdz gawn
and next day morning get up-sm and then Kagate village

mal-th la-sho. 11. samdz gawn mal-th la-sho-nu
search-pu go-pi Kagate village search-pu go-imp2-sim

'ngoynti tuuhngaare dzaak-dish-sho. 12. minu tuuhngaare-m
first Tuuhngaare arrive-Lr-pi and Tuuhngaare-m

'itskaka khoy samdz an loo-puki breek-sho. 13. teprikota-m
little some Kagate their talk-pl write-pi taperecorder-L

hale-sho. 14. minu mekele phedi dzaak-dish-sho.
fill-pi and from there Phedi arrive-Lr-pi

15. phedi dzaak-dish-sha, 'mar 'pa-sho deensha hana,
Phedi arrive-Lr-sm what do-pi rhet.qu

phedi-m samdz-puki 'shush 'baak-teekm. 16. minu, " 'marde
Phedi-L Kagate-pl many live-3pl,p and why

dzaak-ni? " deen-teekm. 17. minu go deen-ti, " in loo
arrive-2pl,qu say-3pl,p and I say-1s,p your language

'sheensi-tsa-kali 'niikshi 'pi-sho tsahn. 18. meko as-kali
learn-inf-ben two come-st p that them,d-ben

loo 'sheen-tsa 'mal-nini! " deen-sho. 19. 'noole 'itska
language teach-auxR imp-pl say-pi after little

phedi gawn hir-sho. 20. minu iri siran khiin
Phedi village walk around-pi and over there Siran house

dzaak-dish-sha, 'mar dum-t deensha meker reekbe lop-sho
arrive-Lr-sm what become-3s,p rhet.qu there potatoes boil-adj

gem-teekm. 21. minu 'itskaka raksi gem-teekme. 22. minu
give-3pl,p and little liquor give-3pl,p and

gopuki 'nelle-m meko raksi tuu-sho. 23. mekele 'itskaka
we all-ag that liquor drink-pi from there little

gruu-sho-nu, piya sesh-sha, herrara 'duuk-tak.
come out-imp2-sim head be dizzy-sm nearly be drunk-1pl,p

24. mekele suni 'book-sha nga mina, gopuki gaak-sho.
from there morning get up-sm and then we walk-pi

25. iri nopra gawn dzaak-dish-sho. 26. nopra dzaak-
over there Nopra village arrive-Lr-pi Nopra arrive-

dish-sha nga mina, samdz-puki 'nelle badzaar la-ma 'baakt.
Lr-sm and then Kagate-pl all market go-3pl pp

27. mekerere samdz thita-kaa 'baak-ta. 28. minu meko thita
there Kagate young-one stay-3s,p and that young

nu baat pa 'baak-sho. 29. minu bessa kahw dum-sho
with talk do stay-pi and much infection be-adj

roy 'pa-sho muru-puki tsaak-teekm.
sickness do-adj people-pl bring-3pl,p

30. mekele pa nga mina, meko nopra koo-sho. 31.
from there do and then that Nopra look-pi

mekele nopra koo-shi, liik-sha nga min, diim koo-sho.
from there Nopra look-sm finish-sm and then flat spot look-pi

32. tanna hawaydzaadz dzuuk-tik tsihiin tey ma-'baa.
but plane land-N however not neg-be

33. mekele pa lesh-sha, pheri 'yi-tak.
from there do return-sm again come down-1pl,p

34. minu 'yi-sha nga mina, khoshmere dzaak-sho. 35.
and come down-sm and then Khoshmere arrive-pi

khoshmere dzaak-sha nga mina, itskaka samdz-puki koo-sho 'na-mi.
Khoshmere arrive-sm and then little Kagate-pl look-pi be-3pl,und

36. samdz loo 'itskaka breek-tak.
Kagate language little write-1pl,p

37. mekele pa 'yi-sha khiin dzaak-tak.
from there do come down-sm house arrive-1pl,p

38. minu khiin dzaak-sha nga mina, 'baak-tak.
and house arrive-sm and then stay-1pl,p

39. minu erikha nu monikha deen-taakse " go 'niikshi samdz
and Erika and Monika say-3d,p we two Kagate

loo 'pay-b-kaa mal-nasku. diisa naakti 'yi-ne
language do-N-one search-1d,np tomorrow noon bring down-auxR

'su tsap-nini? " deen-taakse. 40. minu go samdz mal-ta-mi
whom can-2pl,qu say-3d,p and I Kagate search-1s-

mi. 41. tanna samdz ma-thid-u.
3pl,und but Kagate neg-find-1s,p

42. mekele go deen-ti " a suni 'book-sha nga mina,
then I say-1s,p next morning get up-sm and then

badzaar lay-nu-nga. minu mekele samdz-kaa kush-sh,
market go-1s,np-op and from there Kagate-one come up-sm

kuyk-nu." deen-ti. 43. minu a suni tin badze
bring up-1s,np say-1s,p and next morning three o'clock

'book-sha nga mina, go badzaar la-ti. 44. badzaar la-nga-nu
get up-sm and then I market go-1s,p market go-1s-sim

thampa kookke hir-sha, tummu-sha nga mina, samdz 'nelle 'duuk-
much stick swing-sm fight-sm and then Kagate all drunk-

sha, 'baak-sho 'baak-teekme. 45. minu dzaak-ding-ng tsookti
sm be-st,p stay-3pl,p and arrive-Lr-1s almost

aan-kali 'itska kookke hir-taakme. 46. minu go prook-sha,
me-ben a bit stick swing-3pl,p and I escape-sm

aykttha dzaak-ti.
further along arrive-1s,p

47. mekele samdz thita-kaa rim-sho thita-kaa 'thit-ta.
there Kagate young-one good-adj young-one find-1s,p

48. minu meko thita lem-sha nga mina, khiin tsaak-ta.
and that young follow-sm and then house bring-1s,p

49. lem-sha, khiin tsaak-sha nga mina, mekc-m 'itska
follow-sm house bring-sm and then that-ag little

teprikota-m katha halep-tu. 50. minu kumso halep-tu.
taperecorder-L story fill-3s,p and song fill-3s,p

51. meko kumso 'ta-sha, erikha nu monikha bessa ger-saaks.
that song see-sm Erika and Monika much be happy-3d,p

52. minu khiin dzaak-dish-sha tsihiin, 'mar dum-t
and house arrive-Lr-sm however what become-3s,p

deensha hana, gopuki baadze-kali 'itska awsadi 'laysh-sha
rhet. qu we grandfather-ben little medicine take-sm

la-sho 'na-ki. 53. tanna baadze tsihiin 'ngoyntikana
go-st,p be-1pl but grandfather however before

'beek-maakt. 54. minu dzaak-dik-ka-nu baadze a kaam
die-3s,pp and arrive-Lr 1pl-sim grandfather his work

'nell thum-sha nga mina, 'baak-sho 'baak-teekm.
all finish-sm and then stay-st stay-3pl,p

Free Translation.

1. Now let's see what we did when we left from here a few days ago. The three of us, Erika, Monika, and I, went by plane from here to Jiri.

2. There we slept that night. 3. And having gotten up the next morning, and having searched for porters, we started to walk towards Sabra.

4. Having arrived at Burkhe, on the way to Sabra, we ate lunch. 5. After lunch we continued on our way. 6. And having arrived at Bhitrikhane, we slept. 7. It was very cold in Bhitrikhane. 8. After having arrived and after having slept at Bhitrikhane we got up in the morning and continued walking towards Sabra.

9. We left in the morning and got to Sabra at noon. After I had cleaned the house nicely I let the two girls settle in.

10. After having gotten up the next morning we set out to look for Kagate villages. 11. Since we had to look for Kagate villages we went first to Tuuhngaare. 12. There we wrote down some of the Kagate language. 13. We took some with the tape recorder. 14. From there we went on to Phedi.

15. Lets see what happened after we arrived at Phedi. There were lots of Kagate there. 16. They asked us, "Why did you come?" 17. I said, "Two girls are coming to learn your language. 18. You must teach them." 19. After that we walked around in the village. 20. Let's see what happened after we got to the Siran

house. They gave us boiled potatoes to eat. 21. And they gave us some liquor. 22. We all drank some liquor. 23. When we set out from there our heads were dizzy and we felt a little bit drunk.

24. After having gotten up the next morning we left. 25. We arrived over there at Nopra. 26. After having arrived at Nopra we found out that all the Kagate had left for the market. 27. There was only one young Kagate (to be seen). 28. We stayed with him for a while and talked. 29. Others (from that area) brought sick ones and people with infections to us.

30. Having left from that place, we had a close look at Nopra. 31. Having looked at Nopra village, we looked for a flat place. 32. But there was no place to be found where a plane could land.

33. After we left that place, we came down here again. 34. Coming down, we arrived at Khoshmere. 35. After we had arrived at Khoshmere we found some Kagate. 36. We gathered some language material.

37. We continued on down and arrived at home. 38. And having arrived at home, we stayed.

39. And Erika and Monika said, "We need a Kagate speaker. Whom could you bring us tomorrow?" 40. Then I set out to search for Kagate people. 41. But I could not find any.

42. So I said, "Tomorrow after I get up I will go to the market and I will bring a Kagate speaker from there." 43. After having gotten up at three o'clock the next morning, I went to the market. 44. When I came to the market, the Kagate were swinging sticks and beating each other. They were all drunk. 45. And when I arrived there, they almost beat me. 46. I escaped and went a bit further along.

47. There I found a sincere young fellow. 48-49. And having gone after him, I brought him home and recorded some stories from him 50. and some songs as well. 51. After having listened to the singing Erika and Monika were very happy.

52. Now let's see what else happened when we arrived at home. We had medicine with us for grandfather, 53. but he had already died. 54. By the time we got there our families had already completed the burial ceremonies.

Text 2.

Speech Act: Direct informative
Development Type: Reportive (time)
Situation: Elicited by instructions given to the language helper to write a diary over a certain time period.

1. 'mul suni go sunikana 'book-ti. 2. minu khame
now morning I early get up-1s,p and food

ke-sha, 'dzaa-ta.
cook-sm eat-1s,p

3. mekele phaanra 'sheek-taakng. 4. minu aan kul 'tsiik-
then pot clean-1s,p and my face wash-

sha nga min, aphis kaam 'pa-th la-ti. 5. minu aphis kaam pa
sm and then office work do-pu go-1s,p and office work do

nga min, marlen didi nu dori didi-m tsutti
and then Marlene big sister and Dori big sister-ag leisure time

ge-ti-si.
give-1s,und-3d,ag,p

6. mekele sahar tayping iskul la-nga-nu, laan-m thampa
then town typing school go-1s-sim road-L many

pulis-puki 'baak-teekme. 7. minu meko-puki-m laak-tsa
police-pl stay-3pl,p and these-pl-ag go-inf

ma-ge-yi-mi. 8. minu go 'hir-sha nga min,
neg-give-1s,und-3pl,ag and I go around-sm and then

tayping iskul dzaak-dit-ti.
typing school arrive-Lr-1s,p

9. mekele khiin lesh-sha, pi-ti. 10. minu khame
then house return-sm come-1s,p and food

khay ke-sha, 'dzaa-ta.
vegetable cook-sm eat-1s,p

11. lo mulaakti go.
O.K. today I

Free Translation.

1. This morning I got up early. 2. And having cooked food, I ate.

3. Then I cleaned the pots. 4. And having washed my face, I went to work in the office. 5. After I had done the office work Marlene and Dori let me go.

6. As I went to the typing school in town (I noticed) a lot of policemen in the road. 7. They did not allow me to pass. 8. And having gone around, I arrived at the typing school.

9. Then having returned from there, I came home. 10. And having cooked food and vegetables, I ate.

11. O.K., that's me today.

Text 3.

Speech Act: Direct informative
Development Type: Reportive (event)
Situation: The language helper interviews an old man of Sabra about his injured leg.
The conversation started:

Language helper: "What happened to your leg, Ba-Kantsa?"

Old man: "Long ago it got cut."

Language helper: "How did you cut it?"

1. phullu 'thish-sha, yi-sha ṅga min, kroyk-tu roongu-m.
stones fall-sm come-sm and then hit-3s,p rock-ag

2. hare la-sho. 3. roongu-m bastu koo-th pi-sho.
over there go-pi rock-L animals look-pu come-pi

4. kaahs kur-sha, bistaar la-sha, kaahs kur-sha, phullu
grass carry-sm slowly go-sm grass carry-sm stones

yi-śi ma-tuyk-tu.
come-und neg-know-ls,neg

5. puynthep laa nee, aki kaka dzol hoyk-taak-yi aki.
noise only hear here only hot burn-und-ls,p here

6. aki kaka brew kuysh-sha, meen-da aki taansre 'pa-sho
here only slight touch-sm here-el here scratch do-st

khoy laa deen-sho thiyo.
somehow only say-st was

7. eko-ke-da oshye pa 'tsesh-sha; 'noole-da eko paants
this-of-el here do cut-sm after-el this five

ora krod-a 'baakt. 8. eko-da eko-ke nga rush gruu-sha
piece tear-3s pp this-el this-of of bone come-out-sm

gaak-t 'niikshi.
go-3s,p two

9. oopa-sho-nu tsale-ba.
so doing-imp2-sim control-st,np

Free Translation.

1. Stones fell down a steep embankment and hit me.

2. I had gone over there. 3. I came to the steep cliff to look after the animals. 4. I was going slowly with a heavy load of grass and I did not know that stones were coming down towards me.

5. I heard a noise and here (shows foot) I felt a burning pain. 6. After having touched the area lightly I thought that I must have scratched myself here (again shows the spot).

7. After having examined the wound carefully I discovered that the stone had crushed five toes. 8. Two bones stuck out of this one (points to the toe in question).

9. If I am moving it this way I am able to control my foot.

Text 4.

Speech Act:	Direct informative
Development Type:	Processive
Situation:	We asked the language helper: "How do you Sunwars cook beans?"

1. siibi ke-ka-nu, dopa key-niki, deensha hana?
beans cook-1pl-sim how cook-1pl,np rhet.qu

'ngoynti pedz masnu pa kyor-niki.
first onions small do cut-1pl,np

2. mekele siibi mur-niki. 3. minu siibi a khosh-le
next beans wash-1pl,np and beans its ends-from

khe-niki. 4. minu karay kaa-sha, 'itska tel luuk-niki.
peel-1pl,np and pot heat-sm little oil pour-1pl,np

5. minu pedz sup-sha, tsinka kiik 'payk-niki. 6. minu siibi
and onions add-sm moment burn cause-1pl,np and beans

sup-sha, 'itska wal-niki.
add-sm little fry-1pl,np

7. mekele bwaakku luuk-sha, hiiksi sup-niki. 8. minu
next water pour-sm salt add-1pl,np and

'thampa bruyk 'payk-niki.
much boil cause-1pl,np

9. minu siibi broo-b.
and beans be tasty-st,np

Free Translation.

1. When we cook beans, how do we cook them? First we chop up the onions.

2. Next we wash the beans. 3. And we peel off the ends of the beans. 4. And having heated the pot, we add a little oil. 5. After having added the onions we fry beans and onions together for a while.

7. Next, having poured water in, we add salt. 8. We bring it to a rolling boil.

9. And then the beans will be tasty.

Text 5.

Speech Act: Direct informative
Development Type: Processive
Situation: We, as people coming from a country where rice planting is unknown, asked the language helper: "How do the Sunwars plant rice?"

1. gopuki-m bur biw woyk-ka-nu, dopa woyk-nimi deensha
we-ag rice seed put-1pl-sim how put-3pl,np rhet.qu

hana?

'ngoynti byaph waak-sha nga mina, 'noole daalla 'thook-nik.
first oxen plough-sm and then after soil break-1pl,np

2. daalla 'thook-sha, dzilee-sha, 'noole bur biw bwar-nik.
soil break-sm make smooth-sm after rice seed sow-1pl,np

3. mekele bur biw bwar-sha nga mina, 'marko atar
next rice seed sow-sm and then int on top

mool 'phuyk-nimi. 4. mool 'phuysh-sha, dzilee-
fertilizer spread-3pl,np fertilizer spread-sm make smooth-

nik.
1pl,np

5. bush bur 'baak-t hana, eker 'naakdo bwaakku laye-tsa
white rice be-p itp there night water drain-auxR

'malba. 6. aaga kyer bur 'baak-t hana, bwaakku laye-tsa
imp2 in black rice be-p itp water drain-auxR

ma-'malb.
neg-imp2

7. minu 'tsiikbi tuhkura-m 'neek-nim dee nga mina,
and bird wild dove-ag eat up-3pl,np say and then

gopuki-m kaahs kyor-sha, laysh-sha, atar kaahs sap-nimi.
we-ag leaves cut-sm bring-sm on top leaves cover-3pl,np

8. kaahs sap-sha nga mina, 'noole bur biw 'waak-ba.
leaves cover-sm and then after rice seed grow-st,np

9. minu thrik dum-b..
and O.K. be-st,np

Free Translation.

1. Now how do they (the women) sow rice? First, we break the clods after (the field) has been ploughed with oxen. 2. After the clods have been broken and the soil made smooth we sow the rice seed.

3. Next, after the seed has been sowed they spread fertilizer on top of it. 4. After the fertilizer has been spread it will be smoothed over with earth.

5. If it is white rice, the field must be irrigated during the night. 6. If it is black rice, the field need not be irrigated.

7. After having cut leaves they bring it to the field to spread over the seeds so that the wild doves do not eat the seed. 8. Under this covering the rice seed will start to grow.

9. And it will be O.K.

Text 6.

Speech Act: Direct hortative
Development Type: Processive
Situation: We asked the language helper: "How must beans be cooked to be tasty?"

1. siibi ke-sho-nu, dopa ke-tsa 'malb deensha hana?
beans cook-imp2-sim how cook-auxR imp2 rhet.qu

'ngoynti pedz masnu pa kyor-tsa 'malb.
first onions small do cut-auxR imp2

2. mekele siibi mur-tsa 'malb. 3. minu siibi a
next beans wash-auxR imp2 and beans its

khosh-le khe-tsa 'malb. 4. minu karay kaa-sha 'itska tel
ends-from peel-auxR imp2 and pot heat-sm little oil

luuk-tsa 'malb. 5. minu pedz sup-sha, tsinka kiik 'payk-tsa
pour-auxR imp2 and onions add-sm moment burn cause-auxR

'malb. 6. minu siibi sup-sha, 'itska wal-tsa 'malb.
imp2 and beans add-sm little fry-auxR imp2

7. mekele bwaakku luuk-sha, hiiksi sup-tsa 'malb.
next water pour-sm salt add-auxR imp2

8. minu 'thampa bruyk 'payk-tsa 'malb.
and much boil cause-auxR imp2

9. And it will be O.K.

Free Translation.

1. Now let's see how we cook beans. First, we must chop up the onions.

2. Next the beans must be washed. 3. And the ends of the beans must be peeled off. 4. And having heated the pot, a little oil must be poured into it. 5. And having added the onions they should be fried for a moment. 6. After the beans have been added they too should be fried a little.

7. Next having poured water in, salt must be added. 8. It is important to boil them well.

9. Then the beans will be tasty.

Text 7.

Speech Act:	Direct hortative
Development Type:	Expositive
Situation:	We asked the language helper to imagine a situation where a boy is to leave home for a few days. He should take care of the animals in the shed built in the forest. What would his mother tell him before he leaves?

1. lo, aan taw, gooth la-sha, bastu rim-sho pa koo-
O.K. my son shed go-sm animals well-adv do look-

mi.
und,pl

2. gyar-sha, ma-'baakk-o. 3. heenthe roongu ma-law-o.
play-sm neg-stay-impl steep rock neg-go-impl

4. rawa 'ngoyk-se-nu, koo-sha, 'noyks-o. 5. phash 'paw-a-nu,
tree climb-2s-sim look-sm climb-impl storm do-3s-sim

rawa ma-'ngoyks-o.
tree neg-climb-impl

6. minu aan taw, mesh bastu roongu la-sha, 'thit-nimi.
and my son animals rock go-sm fall-3pl,np

7. rim-sho pa gothla 'paa-mi. 8. kaahs di-th la-sho-nu,
well-adv do herdsman do-und,pl grass get-pu go-imp2-sim

roongu koo-sha 'riik-tsa. 9. ir-le phullu 'thish-sha
rock look-sm cut-imp3 there-from stone fall-sm

'yiy-b.
come down-st

10. bastu bwaakku tuu-th laysh-sho-nu, koo-sha,
animals water drink-pu take-imp2-sim look-sim

khul-tsa 'na-mi. 11. bastu krumu-sha, roongu-m 'thit-nimi.
lead-imp3 be-und,pl animals fight-sm rock fall-3pl,np

12. bastu rim-sho pa ma-koo-sha hana, aan taw, 'te-nga
animals well-adv do neg-look-sm itp my son where-from

mool dum-ba. 13. mool ma-'baak-t hana,
fertilizer become-3s,np fertilizer neg-stay-p ipt

baari-m makay 'tsirsi ma-dum-ba.
field-L corn miller neg-become-st,np

14. baatsa paahnra an-kali bwaakku ge-tsa 'malb.
young animals them-ben water give-auxR imp2

15. bwaakku ma-ge-sha hana, naan-mi 'beek-nim.
water neg-give-sm itp sun-L die-3pl,np

16. lo, aan taw, rim-sho pa goothi-m 'baakk-o. 17. kaahs
O.K. my son well-adv do shed-L stay-impl grass

di-th, bwaakku di-th la-sho-nu, rim-sho pa butt woysh-sha,
get-pu water get-pu go-imp2-sim well-adv do food put-sm

law-o. 18. goothi-m kyarsh dzaak-sha, 'neek-nim.
go-impl shed-L goat arrive-sm eat up-3pl,np

19. bastu rim-sho koo-sho-nu, kaka 'noole 'giik-sha,
animals well-adv look-imp2-sim only after give birth-sm

duud mahi 'dza-tsa 'tayn-si-b.
milk curd eat-inf see-re-st,np

20. lo, aan taw, la-sha nga mina, 'baakk-o goothi-m.
O.K. my son go-sm and then stay-impl shed-L

21. rim-sho pa koo-mi bastu.
well-adv do look-und,pl animals

Free Translation.

1. Well my son, when you arrive at the shed (in the forest) take good care of the animals.

2. Do not sit around playing. 3. Don't go to the cliff. 4. Watch out first before you climb trees. 5. Do not climb trees when it is stormy.

6. My son, make sure the animals don't go near the cliff or they will fall down. 7. Be a good herdsman to them. 8. When you go to get grass cut the grass only after you have looked at the cliff above. 9. There are often (falling stones rolling down). Watch out for them.

10. When you take the animals to drink be on your guard; you are to lead them. 11. When the animals fight they might fall over the cliff.

12. If you don't take good care of the animals, my son, where shall the fertilizer come from? 13. If there is no fertilizer, the corn and the millet will not grow in the field.

14. You must give water to the young animals. 15. If you don't give them water, they will die from the heat.

16. Well then, my son, stay in the shed and do your best. 17. Put the food supply away carefully before you go for grass or water. 18. If you don't put it away carefully, goats will come inside the shed and eat it up. 19. If you don't take good care of the animals they will not give birth and there will be no milk and butter to eat.

20. Well son, go then and stay in the shed. 21. Take good care of the animals.

Text 8.

Speech Act:	Indirect informative
Development Type:	Narrative (participant focussed)
Situation:	We asked the language helper to tell a story, because we needed language material.

1. 'say a dagyu tsihiin baahta a
once his elder brother however speaking one his

pahy tsihiin laata 'niikshi 'baak-sa 'baakt. 2. minu
younger brother however mute two stay-3d pp and

meko 'niikshi 'baak-sa 'baak-sa, 'noole a dagyu-kali
that two stay-3d stay-3d after his elder brother-ben

biha 'paa-me 'baakt.
wedding do-3pl pp

3. minu meko a pahy laata biha 'pa-tsa
and that his younger brother mute wedding do-inf

ma-dum-b. 4. minu meko a dagyu pohgyu-mi
neg-become-st,np and that his elder brother wife-ag

bessa hella 'pam-se 'baakt. 5. minu-da meko mur matrey laata
very hatred do-3d pp and-el that man only mute

bessa buddih 'pa-sho 'baak-maakt.
very wise do-st be-3s,pp

6. minu-da meko a dagyu-mi 'mar 'paw-a 'baakt
and-el that his elder brother-ag what do-3s pp

deensha hana? bessa hella pa 'noole angs 'paa-me 'baakt.
rhet.qu very hatred do after share do-3pl pp

7. minu rim-sho rim-sho baari 'nelle a dagyu
and nice-adj nice-adj field all his elder brother

'giik-b 'giik-b tehrey duud gey-b bastu 'nelle a
give birth-N give birth-N much milk give-N animals all his

dagyu rim-sho khet 'nelle a dagyu angs pa,
elder brother nice-adj field all his elder brother share do

'marko 'paw-a 'baakt. 8. minu meko a pahy-kali
int do-3s pp and that his younger brother-ben

tsihiin roktonge byaph-kaa nu tsokta-kaa baari gew-a 'baakt.
however very old ox-one and piece-one field give-3s pp

9. minu meko a pahy dukh pa nga mina, meko
and that his younger brother pain do and then that

'imtsili katera bane-sha nga mina, 'baak-maakt. 10. minu meko
small hut build-sm and then stay-3s,pp and that

'imtsili katera bane-sha, 'baak-me-nu, do 'paw-a 'baakt-ne
small hut build-sm stay-3s-sim how do-3s pp-ri

deensha hana? meko katera bane-sha, 'baak-na 'baak-n nga mina,
rhet. qu that hut build-sm stay-c stay-c and then

kaabu-da meko a dagyu-mi meko a byaph yo 'tup-sha,
one day-el that his elder brother-ag that his ox also beat-sm

'saysh-sha gew-a 'baakt. 11. minu 'noole meko a
kill-sm give-3s pp and after that his

dagyu-m 'saysh-sha gew-a 'baakta, minu meko laata-mi
elder brother-ag kill-sm give-3s pp and that mute-ag

kyoodz ruu-m dok rap 'paysh-sha nga mina, wod-a 'baakt. 12.
barley field-L upright cause-sm and then put-3s pp

minu 'noole arko muru-mi 'pi-sha, meko byaph-kali phullu-kaa
and after other man-ag come-sm that ox-ben stone-one

'tet-a-nu, meko 'beek-sho byaph ding gol-maakt.
throw-3s-sim that die-adj ox noise fall-3s,pp

13. minu meko laata-mi, "aan byaph 'saysh-sha ge-ti,
and that mute-ag my ox kill-sm give-1s,und,p

go haar " dee, ngaak-maakt. 14. minu meko byaph
I what to do now say weep-3s,pp and that ox

'tep-b muru-mi 'baak-ba, " thakur, " dee nga mina, thaylo-kaa
beat-N man-ag stay-st,np int say and then bag-one

kyet gew-a 'baakt.
money give-3s pp

15. mekele meko byaph she 'lee-th gaak-maakt meko laata.
then that ox meat sell-pu go-3s,pp that mute

16. minu " khassi a she 'gyap-nini de ma-'gyap-nini, khassi
and goat its meat buy-2pl,qu or neg-buy-2pl,qu goat

a she 'gyap-nini koon,"" de-n de-n gaak-maakta. 17. 'noole
its meat buy-2pl,qu perhaps say-c say-c go-3s pp after

thaylo-kaa kyet tsaakg-a 'baakt.
bag-one money bring home-3s pp

18. 'noole a dagyu yo, " mammey, 'mar pa kyet
after his elder brother also int what do money

tsaakg-iy-ey, " deen-maakta. 19. minu, " aan byaph 'saysh-
bring home-2s,qu-e2 say-3s,pp and my ox kill-

sha ge-ti. minu aan byaph she 'lee-sha, oondee tsaak-
sm give-1s,und,p and my ox meat sell-sm so bring home-

ta, " deen-maakt. 20. mekele-da la-sha, a 'giik-b
home-1s,p say-3s,pp there-el go-sm his give birth-N

bii-kaa 'sad-a 'baakt. 21. minu nga min meko a
cow-one kill-3s pp and and then that his

dagyu-m, "bii she 'gyap-nini," de-n de-n gaak-maakta.
elder brother-ag cow meat buy-2pl,qu say-c say-c go-3s,pp

22. bessa 'tup-me 'baakt meko gawn-nga muru-mi. 23. "bii
very beat-3pl pp that village-of people-ag cow

she kaka 'su-kaa 'gyap-b? " dee nga mina, dzaak-maakta. 24. me
meat only who-one buy-3s,np say-and then arrive-3s,pp

meko a pahy a khiin 'kroysh-sha gew-a 'baakt
that his younger brother his house burn down-sm give-3s pp

pheri.
again

25. 'noole a pahy gaak-maakta. 26. 'noole
after his younger brother go-3s,pp after

'marko, " 'yaakphe awsadi 'gyap-nini? " dee nga mina, meko pulu
int leech medicine buy-2pl,qu say and then that ashes

'lee-na 'lee-n gaak-maakta. 27. 'gyap-me 'baakta. 28. 'noole
sell-c sell-c go-3s,pp buy-3pl pp after

thaylo-kaa kyet tsaakg-a 'baakt.
bag-one money bring-home-3s pp

29. mekele meko a dagyu hillo 'paw-a 'baakt,
then that his elder brother question do-3s pp

" mammey, do pa kyet tsaakg-iy-ey ? " deen-maakta.
int how do money bring home-2s,qu-e2 say-3s,pp

30. minu, " aan khiin 'kroysh-sha ge-ti. 31. mur
and my house burn down-sm give-1s,und,p men

an-kali, " marko pulu 'gyap-nini ? " dee nga min, kyet
them-ben int ashes buy-2pl,qu say and then money

tsaak-ta-ey, " deen-maakt.
bring home-1s-e2 say-3s,pp

32. minu meko a dagyu-ke dzilmile 'nak khiin
and that his elder brother-of shining new house

la-sha, 'kroysh-sha nga mina, " karani 'gyap-nini, " de-n de-n
go-sm burn down-sm and then ashes buy-2pl,qu say-c say-c

gaak-maakta. 33. bessa 'tup-me 'baakt.
go-3s,pp very beat-3pl pp

34. minu 'noole a dagyu tham prung dum-maakta.
and after his elder brother very poor become-3s,pp

35. meko a pahy laata 'thampa kyet thiy-b
that his younger brother mute very much money touch-N

mur dum-sha nga mina, 'baak-maakta. 36. minu nga mina 'noole
man become-sm and then stay-3s,pp and and then after

tehrey 'shush tahni dum-maakt meko laata. 37. a
very very rich become-3s,pp that mute his

dagyu tsihiin puyn-sha, 'dzay-b mur dum-maakt.
elder brother however beg-sm eat-N man become-3s,pp

Free Translation.

Note: We questioned our language helper as to how it was that a mute was able to speak in this text. He was not disturbed by the apparent inconsistency, but replied that mutes are able to communicate in some way.

1. Two brothers once lived together and the younger of the two was a mute. 2. They had lived together for some time and at length a marriage was arranged for the elder brother.

3. A marriage arrangement for the younger brother was impossible (because) he was a mute. 4. His elder brother and

his sister-in-law made life very difficult for him. 5. The younger one, however, though he was a mute, was very clever.

6. Now what did his elder brother do? He divided the inheritance and thus brought trouble to the mute. 7. The good fields, the pregnant cows, the milk-producing cows, the rice fields became the property of the elder brother. 8. To the younger brother, however, he gave an old ox and one terraced field.

9. The younger brother was now very destitute, so he built a little hut for himself and lived in it. 10. Let's see what happened while he was living there. One day the elder brother killed the ox belonging to the younger brother. 11. The younger brother then propped the dead ox up in a barley field. 12. Later on a man came by and threw stones at the ox. This made the dead ox fall over.

13. The mute said, "My ox was killed, what shall I do now?" and he wept. 14. The man who had thrown the stones exclaimed, "My goodness" and he gave a bag full of money to the mute. 15. The mute then went to sell the meat of the ox. 16. He went along saying, "Will you buy goat meat or will you not buy any? Why not buy some goat meat?" 17. From this he brought home another bag full of money.

18. Then his elder brother said to him, "How did you get all that money?" 19. "My ox was killed, and I sold the meat, so I received the money," the younger brother replied. 20. Then (the elder brother) went home and killed one of his best cows. 21. Then he went out calling "Come and buy beef." 22. But the villagers beat him up, saying "Who in all the world would buy beef?" 23. So he returned home, 24. and went to set fire to the hut of his younger brother.

25-26. Then the younger brother left and went selling the ashes, calling out, "Will you buy medicine against leeches?" 27. And, indeed, the people bought it. 28. Later he came back home with another bag of money.

29. His elder brother questioned him saying, "Where did you get all this money you brought home?" 30-31. "My house burnt down, so I went out selling the ashes, asking the people, "Do you want to buy ashes? This is how I got this money," he answered.

32. The elder brother went home, burnt down his own new house, took the ashes and went out calling, "Do you want to buy ashes?" 33. The villagers beat him up as well.

34. Through these events the elder brother became very poor. 35. His younger brother, the mute, however, having made so much money got very rich. 36. Later on the mute got still richer. 37. His elder brother, however, became a beggar.

Text 9.

Speech Act: Indirect informative
Development Type: Narrative (participant focused)
Situation: We asked the language helper to tell a story, because we needed language material.

1. 'say 'ngoynti bwaaki-m biralo nu dzoy grum-sa 'baakt.
long before jungle-L cat and leopard meet-3d pp

2. minu mamapaahnits-nga 'saynu layem-se 'baakt.
and same family-of since long belong-3d pp

3. dzoya-m tsihiin rawa 'ngoyk-tsa ma-dzook 'baak-maakta.
leopard-ag however tree climb-inf neg-know be-3s,pp

4. minu dzoya-m biralo-kali tohringga oo-tsa 'sheen-da
and leopard-ag cat-ben hole enter-inf teach-3s

'baakta. 5. biralo-m tsihiin dzoy-kali rawa 'ngoyk-tsa
pp cat-ag however leopard-ben tree climb-inf

'sheen-da 'baakt.
teach-3s pp

6. minu nga min 'noole do 'pam-se 'baakt-ne deensha hana?
and and then after how do-3d pp-ri rhet.qu

dzoy 'la-maakt 'noole. 7. minu biralo a 'dzatse thook
leopard go-3s,pp after and cat its food stuff

'neekg-a 'baakt. 8. minu dor-sha, tohringga-m la-sha,
eat up-3s pp and run-sm hole-L go-sm

oo-maakt. 9. minu biralo a paala la-sha, dzoy a
enter-3s,pp and cat its turn go-sm leopard its

'tsayb 'nelle 'saysh-sha gew-a 'baakta. 10. minu 'noole
young ones all kill-sm give-3s pp and after

pi-maakt.
come-3s,pp

11. minu dzoy nu biralo rawa-kaa-m 'ngoyk-sasa 'baakt.
and leopard and cat tree-one-L climb-3d pp

12. minu 'nak 'nak rawa 'ngoyk-b 'baak-maakt. 13. meko bela
and new new tree climb-N be-3s,pp that time

dzoy rawa 'ngoyk-n 'ngoyk-n 'baak-me-nu, biralo la-sha, a
leopard tree climb-c climb-c be-3s-sim cat go-sm its

nangra ditish kroysh-sha, dzoy-kali karam tsiram 'tookg-a
claws noise bite-sm leopard-ben noise make fall-3s

'baakt-ne. rawa luukdzu-le. 14. minu dzoy 'dook-sh
pp-ri tree downward-from and leopard fall-sm

liik-sha n nga min, gurur pa biralo kheda pa dor-maakt. 15.
finish-sm and then noise do cat follow do run-3s,pp

minu biralo tsihiin rawa 'ngoyk-sha, broyn-maakt.
and cat however tree climb-sm live-3s,pp

16. mulaakt sinaakt 'mar dum-b deensha hana?
nowadays what become-st rhet.qu

biralo 'shush rawa 'ngoyk-b. 17. dzoy tsihiin kayn
cat much tree climb-st,np leopard however not at all

ma-'ngoyk-b. 18. tohringga nu bwaaki-m gaak-b. 19. minu
neg-climb-st,np hole and jungle-L walk-st,np and

dzoy nu biralo mamapaahnits 'na-si. 20. biralo aykts
leopard and cat same family be-3d,st cat small

'baak-b ngalaa as kul guy khoyli 'nelle 'khalkanga 'baak-
be-st,np although their face hand leg all same be-

b biralo nu dzoy-ke.
st,np cat and leopard-of

Free Translation.

1. Long ago a cat and a leopard met in a jungle. 2. They have always belonged to the same family. 3. The leopard, however, did not know how to climb trees. 4-5. The leopard taught the cat to enter holes and the cat taught the leopard to climb trees.

6-7. Let's see what they did after this. The leopard left and went to eat the cat's food. 8. The leopard ran to the hole and got in. 9-10. The cat, however, went (to the leopard's hole), killed all the young ones of the leopard and then returned.

11. Then the leopard and the cat were climbing the same tree. 12. The leopard was still learning to climb. 13. The cat had just come from the leopard's hole to the tree which the leopard was climbing. The cat came and bit off the leopard's claws causing him to fall down from there. 14. And having fallen, he ran after the cat. 15. The cat, however, saved its life by climbing a tree.

16. Nowadays, what is the situation? Cats frequently climb trees. 17. The leopard, however, does not climb trees at all. 18. He only enters holes and walks through the jungle. 19. Yet the cat and the leopard are of the same family. 20. Although the cat is smaller, the face and paws of the cat and the leopard are the same.

Text 10.

Speech Act: Indirect hortative
Development Type: Narrative (event focused)
Situation: We asked the language helper to tell a story, because we needed language material.

1. 'say kutsum-kaa-mi pasal-nga tsokta-kaa she lad-a
once dog-one-ag shop-of piece-one meat take-3s

'baakt.
pp

2. khuy pa lad-a 'baakta. 3. minu meko kutsumu-m,
thief do take-3s pp and that.dog-ag

"thit-nim " dee dor-maakta. 4. dor-me dor-me-da, la-me
find-3pl,np say run-3s,pp run-3s run-3s-el go-3s

la-me-da, ma-thit-me 'baakta. 5. meko she yo ma-bwaw-a
go-3s-el neg-find-3s pp that meat also neg-eat-3s

'baakta. 6. minu la-me-nu-da, theeb khola-kaa 'baak-maakt.
pp and go-3s-sim-el big river-one be-3s,pp

7. minu meko khola-mi 'imtsili 'saangu-kaa 'baak-maakt.
and that river-L small bridge-one be-3s,pp

8. minu meko saangu-mi meko kutsum la-me-nu-da, uy a
and that bridge-L that dog go-3s-sim-el below his

tsaya 'taw-a 'baakta. 9. arko kutsum she tal kam-sho
image see-3s pp other dog meat piece carry-st,p

'taw-a 'baakt bwaakku-mi. 10. minu-da " 'mar muyu arko
see-3s pp water-L and-el what down there other

kutsum-ay kaka she kur-sho 'baakta, go-y kur-sho tsuun,"
dog-e2 only meat carry-st pp I-only carry-st np

dee nga mina, " how " , deen-maakta. 11. a shoo " how "
say and then whoof say-3s,pp his mouth whoof

deen-me-nu-da, 'noole-da meko she thuu proyn-sha nga min,
say-3s-sim-el after-el that meat noise escape-sm and then

khola-m 'yold-a 'baakt.
river-ag take away-3s pp

12. minu mo-pa-bike muru-mi " kyet 'shush tulep-tu "
and so-do-N man-ag money much gather-3s,p

dee nga mina, " ann 'shush banep-tu " dee nga mina, genayo
say and then corn much make-3s,p sav and then never

ma-aantee-tsa. 13. minu aantee-si-ya-nu ma-dum-b.
neg-greedy-imp3 and greedy-re-3s-sim neg-become-st,np

Free Translation.

1. Once a dog took a piece of meat from a shop.

2. He stole it and took it away. 3. The dog said to himself, "They will surely find me," so he ran away. 4. He kept running and so they did not catch him. 5. He had not eaten the meat yet. 6. And as he went along he came to a big river.

7. There was a small bridge over the river. 8. As the dog crossed the small bridge he saw his reflection below (in the water). 9. He saw another dog carrying a piece of meat in his mouth. 10. And wondering, "Is that another dog carrying meat?" he barked. 11. When he barked "Woof", the meat dropped and the water carried it away.

12. Therefore, men say, "The one who makes a lot of money or the one who has a lot of corn must never be greedy." 13. To be greedy is not good.

Text 11.

Speech Act:	Indirect hortative
Development Type:	Narrative (event focused)
Situation:	We asked the language helper to tell a story, because we needed language material.

1. 'say baman-kaa nu baman-i-kaa 'baak-sa 'baakt.
once Brahman-one and Brahman-f-one live-3d pp

2. minu nga mina meko baman nu baman-i-mi theeb yits-kaa
and and then that Brahman and Brahman-f-ag big rat-one

thul-sho 'baak-sa 'baakt. 3. minu thul-se, thul-se, meko
feed-st stay-3d pp and feed-3d feed-3d that

yitsu-mi yo loo 'rup-b dum-maakt. 4. minu 'mar
rat-ag also talk understand-N become-3s,pp and what

'pam-se 'baakt-ne deensha hana, kaabu-da meko as-ke rikle
do-3d pp-ri rhet. qu one day-el that they-of small

'nak thi-sho al-kaa 'baak-maakt-ne.
new born-adj child-one stay-3s,pp-ri

5. 'nak thi-sho al-kaa 'baak-maakta, minu meko
new born-adj child-one stay-3s,pp and that

baman-kali, " sarad 'pa-tsa, " dee nga mina, bre-th
Brahman-ben ceremony do-inf say and then call-pu

dzaak-ma 'baakt.
arrive-3pl pp

6. bre-th dzaak-ma-nu, 'noole 'mar 'paw-a 'baakt
call-pu arrive-3pl-sim after what do-3s pp

deensha hana? " 'mul ma-la-nga hana, yo eko sarad-nga
rhet. qu now neg-go-1s itp also this ceremony-of

'dzatsa thook kyet 'nelle arko baman layk-ba, la-nga
food stuff money all another Brahman take-st,np go-1s

hana, eko al-kaa tsah, " deen-maakt.
itp this child-one is say-3s,pp

7. minu meko a 'miish tsihiin bwaakku 'di-th la-sho
and that his wife however water get-pu go-st

'baak-maakta. 8. meko bwaakku 'dit-tike nikay ngon khodeeb
be-3s,pp that water get-N very far so

'baak-maakt.
stay-3s,pp

9. minu ngon khodeeb 'baak-maakta, 'noole-da meko
and far so stay-3s,pp after-el that

baman-i-mi, " 'mul 'laptso 'tsook-sha nga mina, 'la-tsa dum-
Brahman-f-ag now door lock-sm and then go-inf become-

ti, " dee nga mina, 'laptso 'tsookg-a 'baakt. 10. minu meko
3s,p say and then door lock-3s pp and that

theeb yitsu nu al 'baak-sa 'baakt. 11. mekele-da do
big rat and child stay-3d pp there-el what

'pam-se 'baakt deensha hana? 'baak-sa 'baakta. 12. minu theeb
do-3d pp rhet.qu stay-3d pp and big

bus-kaa dzaak-maakt.
snake-one arrive-3s,pp

13. bus-kaa dzaak-me-nu-da, meko 'nak thi-sho al
snake-one arrive-3s-sim-el that new born-adj child

a rina-mi meko busu oo-maakt.
his smell-I that snake enter-3s,pp

14. oo-maakta, minu meen bela busu-mi al 'bwa-tsa-
enter-3s,pp and that time snake-ag child eat-inf-

kali [illegible]ik dum-maakt. 15. minu-da, " meko theeb yitsu-mi
pu ready become-3s,pp and-el that big rat-ag

al 'bwa 'tsap-tu, " dee nga mina, dor-sha, pi-sha meko
child eat can-3s,p say and then run-sm come-sm that

bus-kali tin tunka 'sel-a 'baakt. 16. minu 'sad-a 'baakta,
snake-ben three piece make-3s pp and kill-3s pp

'noole a shoo 'nelle hushe kur-sha nga mina, " 'mul aan
after his mouth all blood carry-sm and then now my

tahni baman-i-kali 'koyn-nu-nga, " dee nga mina, la-maakt.
dear Brahman-f-ben show-1s-opt say and then go-3s,pp

17. minu-da baman-i bwaakku kur-sha, pish-sha nga mina,
and-el Brahman-f water carry-sm bring-sm and then

adah laan-mi grum-a 'baakt.
half way-L meet-3s pp

18. minu adah laan-m grum-sh liik-sha nga mina, meko theeb
and half way-L meet-sm finish-sm and then that big

yitsu a shoo 'nelle hushe kur-sha, meko baman-i-mi da
rat his mouth all blood carry-sm that Brahman-f-ag el

gamew-a 'baakta, a al kaka 'bwa-sha nga mina, a shoo
think-3s pp his child only eat-sm and then his mouth

'nelle hushe kur-sha, pi-maakt, dee, phullu tsogup-sha nga
all blood carry-sm come-3s,pp say stone throw-sm and

mi, 'tsesh-sha, 'sad-a 'baakt.
then beat-sm kill-3s pp

19. minu meko baman-i dor-dor-sha, pi-maakt. 20. minu-
and that Brahman-f run-run-sm come-3s,pp and-

da al koong-a-nu-da 'ngoynti do pa wod-a, mo 'pa nga mo
el child look-3s-sim-el before how do put-3s so do and so

'pa, ala 'ngoynti-mi-da theeb busu tin tunka kaka dum-sho,
do child before-L-el big snake three piece only become-pi

taw-a 'baakt.
see-3s pp

21. minu 'noole baman-ey dzaak-maakt. 22. minu-da meko
and after Brahman-e2 arrive-3s,pp and-el that

baman-i baman bessa ngaak-sa 'baakt.
Brahman-f Brahman very weep-3d pp

23. bessa ngaak-sa 'baakta, " meko theeb yitsu-mi-da meko
very weep-3d pp that big rat-ag-el that

bus-kali 'saysh-sha, kaka koo-th pi-ta. " meen baman-i-mi
snake-ben kill-sm only look-pu come-3s,p that Brahman-f-ag

" a al kaka 'bwaw-a 'baakta, " deen-maakt.
her child only eat-3s pp say-3s,pp

24. minu mo-pa-tike eko loo ma-'pay-b kaka 'dzook-nimi.
and so-do-N this talk neg-do-N only know-3pl,np

25. eko mur kaka ma-'dzook-si-b. 26. minu 'marey kaam
this man only neg-know-re-3s,np and whatever work

'baak-la, 'nell kaam 'pay-a-nu, 'ngoyntikana," eko oon
stay-may be all work do-3s-sim before this so

dum-ba koon " , dee game-sha, 'pay-a-nu, 'noole 'shush
become-st,np perhaps say think-sm do-3s-sim after very

rim-sho dum-ba. 27. 'ngoyntikana dzaahtdzuuht pa do
well-adv become-st,np before hurry so how

deeb-ey, dee 'pay-a-nu, 'noole kay ma-rim-sho dum-
say-e2 say do-3s-sim after not at all neg-nice-adj become-

b.
st,np

28. minu mo-pa-tike 'nelle din tehrey rim-sho pa nga mina,
and so-do-N all day very nice-adv do and then

'pa-tsa 'malb.. 29. 'noole rim-sho piy-b dum-ba.
do-auxR imp2 after nice-adj come-N become-st,np

Free Translation.

1. There lived once a Brahman with his wife. 2. That Brahman and his wife had been feeding a big rat. 3. After having been fed for a long time that rat learned to understand man's language. 4. Let's see what happened. One day, a baby was born to them.

5. Sometime after the baby was born the Brahman was called to conduct an ancestor worship ceremony.

6. When he got this call he reasoned with himself, "If I do not go (to conduct the ceremony), the fee, the food and the money will be given to another Brahman. If I do go, however, the child will be alone in the house."

7-8. The water place was very far from the house and his wife had to get water.

9. The water place was very far from the house, so the wife said to herself, "When I have locked up the house I will be ready to go." So she locked up and left. 10. The rat and the child were the only ones in the house. 11-12. Let's see what happened. The two of them were there when a big snake arrived.

13. As the snake was arriving and entering it smelled the newborn child.

14. After having entered, the snake was determined to eat the child. 15. The big rat having said to herself, "The snake will eat the child", came running and bit the snake into three pieces. 16. With a mouth still bloody from having killed the snake the rat said, "Now, I will show myself to my beloved master's wife"; and she left.

17. The Brahman's wife was half way home, carrying the water, when she saw the rat. 18. Meeting it there, half way between house and water place, and seeing that the rat was bloody, the Brahman's wife thought that the rat had eaten her child. Saying "That is it, why are you so bloody?" she threw a stone at the rat and killed it.

19. Then the Brahman's wife hurried home. 20. As she was looking for her child, she saw the dead snake in three pieces in front of the baby, and the baby as she had left it.

21. Some time later the Brahman returned. 22. They both wept bitterly. 23. They both wept bitterly. Then the woman said, "This big rat came only to look for me after it had killed the snake." The Brahman's wife suspected the rat of having eaten her baby.

24. We therefore must remember that even if the animals are not able to talk, they know things. 25. Only man does not know. 26. Whatever work needs doing, when doing it, do it with much thought and it will turn out well.

27. Doing things in a hurry will never turn out well.

28. And therefore work must be done thoughtfully. 29. And then the outcome will be good.